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THE AMERICAN ROSE ANNUAL



1923

THE AMERICAN ROSE SOCIETY

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All membership i ies and payments should _ _ _ _ _

J. W. FOSTER, Secretary,
Philadelphia, Pa., U. S. A.

The American Rose Society

ORGANIZED 1899. INCORPORATED 1921

MEMBERSHIP

(According to Revised Constitution adopted Sept. 29, 1920.)

LIFE MEMBERS pay \$50, and are thereafter exempt from the payment of dues. The fees received from life members are invested as a permanent sustentation fund.

RESEARCH MEMBERS pay \$20 or more annually, all funds so received being devoted to rose research.

SUSTAINING MEMBERS pay \$10 annually.

ANNUAL MEMBERS pay \$3 each year.

AFFILIATED MEMBERS are received at \$3 through the secretary or other official of an organized rose or horticultural society, who will distribute the publications to which such members are entitled. If 10 or more affiliated members are so received, a rebate of 50 cents each is returned; if 50 or more, there is a return of 75 cents each; if 100 or more, there is a return of \$1 each.

All members vote at all meetings, receive the publications of the Society (affiliated members through their secretaries), and are provided with Membership Cards entitling them to admission to all exhibitions in charge of the Society.

EXHIBITIONS AND ANNUAL MEETING

The American Rose Society holds annually one or more exhibitions. These usually consist of an exhibition held in connection with some large flower show, and of one or more outdoor exhibits held at some one of the Society's Rose-Test Gardens, or at some other large rose-garden. Information will be sent to members concerning any such exhibitions in 1923.

PUBLICATIONS

THE AMERICAN ROSE ANNUAL

is mailed in March to all members, and copies are sent to the secretaries of all affiliated societies for each member thereof for whom proper payment has been made. It cannot be bought in book-stores.

Extra copies may be had, by members only, at \$2, upon application to the Secretary. While available, the Annuals for 1922, 1921, 1919, 1918 and 1917 are supplied to members only at \$3 each, or, while available, including 1923 membership and six Annuals, for \$18. (The 1916 and 1920 Annuals are out of print.)

THE MEMBERS' HANDBOOK

will be issued in May or June, containing proceedings of meetings in brief form, rules of registration, judging, premium lists, etc. It will also contain the complete membership list to April 15, both in alphabetical and in geographical forms, and seasonable rose information, including announcements of rose pilgrimages in various sections.

All membership inquiries and payments should be addressed to

JOHN C. WISTER, Secretary,
606 Finance Building, Philadelphia, Pa., U. S. A.



THE AMERICAN
ROSE ANNUAL



PLATE I. The new Hybrid Tea Rose, SENSATION

To be introduced in 1923. Originated by the Joseph H. Hill Co., of Richmond, Ind., primarily for greenhouse culture; the result of a cross of Hoosier Beauty X Premier.

THE AMERICAN ROSE ANNUAL

*THE 1923 YEAR-BOOK OF
ROSE PROGRESS*

EDITED FOR THE AMERICAN
ROSE SOCIETY BY

J. HORACE McFARLAND



1923
AMERICAN ROSE SOCIETY
EDITOR'S OFFICE
HARRISBURG, PA.

THE American Rose Annual is supplied to all members of the American Rose Society whose dues are paid for the current year. Additional copies are supplied to members only at \$2 each, postpaid. When sold separately, the price of the Annual is \$3, and includes annual membership. Members may obtain copies of the 1917, 1918, 1919, 1921 and 1922 Annuals, so long as in print, at \$3 each, or the six issues will be supplied, while in print, for \$18, including current membership.

Address, JOHN C. WISTER, *Secretary*
606 Finance Building, Philadelphia, Pa.

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Floriculture

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By J. HORACE MCFARLAND, Editor

The 1924 American Rose Annual will be issued in March, 1924

*Completely prepared, illustrated and
printed by the*

J. HORACE MCFARLAND COMPANY

Mount Pleasant Press

Harrisburg, Pa.

A WISH

*May my heart be like a rose
Blooming in a quiet close,
Sun-loved, sweet, and oh, so fair,
Charming all who enter there.*

*May my thoughts be like the rose
Perfuming the little close,
And my acts be free of strife,
Making sweet the hours of life.*

—FLORENCE VAN FLEET LYMAN

(Mrs. Lyman is sister to the late Dr. W. Van Fleet)

THE AMERICAN ROSE SOCIETY

ORGANIZED MARCH 13, 1899

INCORPORATED JULY 7, 1921

*"To increase the general interest in the cultivation and improve
the standard of excellence of the Rose for all people"*

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<i>Vice-President</i>	F. L. ATKINS, Rutherford, N. J.
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MEMBERSHIP

LIFE MEMBERS (\$50), RESEARCH MEMBERS (\$20 or more annually), SUSTAINING MEMBERS (\$10 annually), and ANNUAL MEMBERS (\$3), receive all publications, are entitled to admission upon presentation of membership card to all exhibitions managed by the Society, and can vote at all meetings.

AFFILIATED MEMBERS pay \$3 each, and have all privileges. If 10 or more such memberships are sent in by the secretary of a local society interested in rose culture, 50 cents each is returned for the use of such society; for 50 or more members, 75 cents each is returned; for 100 or more, \$1 each. Publications for affiliated members are sent to and distributed by the local secretary.

Remit to order of American Rose Society, and address

JOHN C. WISTER, Secretary, 606 Finance Building, Philadelphia

*Deceased

EDITOR'S PREFACE

THE EDITOR sends out this eighth issue of the American Rose Annual with peculiar satisfaction, because the members of the American Rose Society, for whom he has been merely switchboard and mouthpiece, have spoken so clearly and freely upon the rose problems of their own origination. To obtain and associate these individual experiences, suggestions, and hopes is the fine function of the Annual.

There is definite evidence of a great increase in rose interest in America. All over the land, literally from the Arctic Circle to Central America, men and women are working to make the rose universal. Beyond our own vast territory, too, members of the American Rose Society show a deepening interest in extending the dominion of the Queen of Flowers.

President Pyle's stirring message to members, the differing angles of rose development taken by three eminent magazine editors, and the urgent need made evident for support that may forward American rose research, all demand general interest of the unselfish sort. Somewhere there is a worker, possibly of Van Fleet genius and quality, who may thus be supported toward the doing of great things for the rose in America.

It is believed that the critical study of climatic relations made by Capt. Thomas and the referendum report on "The Favored Roses of All America" are the most important and helpful presentations yet made toward assuring rose success for the beginner. In compliance with the feeling of the President and the Chairman of the Membership Committee, there have been added brief suggestions for starting with roses. All will find both interest and help in the Members' Rose Forum, a feature which may well be continued in future issues.

Readers of this Annual should consider that not a single article of the seventy-eight separate items included in this Annual is without helpful significance. The "Rose Notes" are quite as important as the longer articles, and it is the Editor's regret that the inflexible requirement of not more than a parcel-post pound for the completed Annual has excluded many more

interesting items. The American Rose Society has no sufficient support, and it is only by close economy and through the unpaid work of those who are interested that it can continue to do much for the rose in America.

Especial care has been given to the news of rose varieties presented in these pages. "The New Roses of All the World" is as nearly inclusive a list as persistent inquiry will accomplish. Mr. Gersdorff's notable descriptions and bloom-records of more than a hundred roses will prove most valuable. It is believed to be the first uniform and critical showing of the kind, and if such impartial descriptions and records are made and compiled for other regions, there will be accumulated a body of invaluable rose information.

In the eight years covered by the Annual, from 1916 to 1923, the Editor has sent out from his office (at no cost to the American Rose Society for the clerical work involved) nearly eleven thousand rose letters, and has received at least as many. Increasingly he has come to regard as his helpful friends all who love the rose anywhere in the world, and he owes to them hearty thanks. Now that it seems expedient to retire from the editorial relation which has been so pleasant, he here acknowledges the fine quality of the rose folks everywhere whose good-will and good work have made the successive Annuals possible; and that constantly expressed good-will has been his abundant compensation for the not inconsiderable and otherwise unrewarded labor involved.

It is in order to refer with commendation to the purveyors of roses and rose supplies whose advertising announcements follow the text of this Annual. These pages are a safe marketplace for what the rose-lover needs.

J. HORACE McFARLAND

*Harrisburg, Pa.,
March 22, 1923*

CONTENTS

	Page
EDITOR'S PREFACE	5
THE PRESIDENT'S MESSAGE <i>Robert Pyle</i>	9
ROSES AS AN OPEN SESAME <i>Richardson Wright</i>	12
THE NEW DAY OF THE ROSE <i>Leonard Barron</i>	14
A CRITICAL PERIOD IN ROSE DEVELOPMENT <i>Chesla C. Sherlock</i>	16
WHO WILL MAKE NEW GARDEN ROSES WORTH WHILE? . <i>Robert Pyle and J. Horace McFarland</i>	19
CHOOSING ROSES INTELLIGENTLY . . <i>Capt. Geo. C. Thomas, Jr.</i>	23
THE FAVORED ROSES OF ALL AMERICA . <i>A Referendum Report</i>	38
BEGINNING WITH ROSES <i>The Editor</i>	43
PHOSPHORIC ACID FOR ROSES <i>J. Horace McFarland</i>	46
THE MEMBERS' ROSE FORUM	52
MR. SCHWAB'S ROSE-GARDENS AT LORETTO <i>Charles Wellford Leavitt</i>	57
ROSES NEAR SMOKY PITTSBURGH <i>W. G. Irwin</i>	59
A BACK-YARD ROSE-GARDEN IN KENTUCKY . . <i>W. C. Wood</i>	61
THE ROSE CITY OF THE EAST? <i>Walter E. Clark</i>	68
WHAT ROSES ARE REALLY HARDY? <i>J. H. Nicolas</i>	71
A ROSE REPORT FROM SOUTHERN ONTARIO <i>Chester D. Wedrick</i>	73
A ROSE-GARDEN IN KANSAS <i>Rev. J. A. B. Oglevee</i>	75
MONTANA SPEAKS UP! <i>Mrs. Charles E. Meagher</i>	79
ROSES EVERY DAY IN THE YEAR! . . . <i>Mrs. James M. Rhodes</i>	83
SEEING CALIFORNIA ROSE CONDITIONS . . . <i>John C. Wister</i>	85
THE PRODUCTION OF ROSE BUSHES IN CALIFORNIA . . . <i>George C. Perkins</i>	91
A SPOKANE BLOOM-RECORD <i>William L. Langbehn</i>	95
ROSES NORTH OF THE ARCTIC CIRCLE <i>Grace A. Hill</i>	97
ROSE HAPPENINGS IN AMERICA <i>Correspondence</i>	99
THE YELLOW CLIMBER, EMILY GRAY <i>An Editorial Observation</i>	104
THE NATIONAL ROSE-TEST GARDEN <i>F. L. Mulford</i>	105
THE ROSE CUT-FLOWER SITUATION <i>S. S. Pennock</i>	107
"WHAT IS THE NAME OF THAT ROSE?" <i>A Discussion on Labels</i>	113
ROSES IN AUSTRALIA <i>E. H. Wilson</i>	118
ROSES IN THE PHILIPPINES <i>Mrs. Paz L. Bautista</i>	121
THE SECRETARY'S EUROPEAN ROSE VISITS . . <i>John C. Wister</i>	124
THE GREATEST ROSE-GARDEN IN THE WORLD <i>J. C. N. Forestier</i>	132

THE SURPRISING ROSE CLIMATE OF ROME	<i>Countess Giulio Senni</i>	136
A GERMAN REPORT ON THE NEW ROSES	<i>Wilhelm Kordes</i>	139
THE NEW ENGLISH ROSES OF 1922	<i>Courtney Page</i>	142
THE NEW ROSES OF ALL THE WORLD	<i>An Editorial Survey</i>	147
Great Britain, 148—France, 150—United States, 153—New Zealand, 153—Germany, 154—Holland, 154—Grand Duchy of Luxembourg, 154—Australia, 154.		
ONE HUNDRED AND TWENTY ROSES DESCRIBED AND RECORDED	<i>Charles E. F. Gersdorff</i>	155
ROSES REGISTERED IN 1922		175
ROSE NOTES	<i>The Editor and Others</i>	176
The Staying Qualities of Hybrid Tea Roses—A Yellow Columbia—Another Test-Garden? 176; The Passing of a Great Congressional Rose Lover—Experiences with Janet and Rose Marie—A Canadian College Rose-Garden, 177; Roses in Scientific Climatic Studies—Trying to Grow Roses without Roots—A Harison's Yellow Hedge, 178; Making the Wilderness "Blossom as the Rose"—The Working Value of Municipal Rose-Gardens—Gloire de Dijon Hardy near New York, 179; Hardiness of the Van Fleet Roses—No Blue Rose?—Roses and Rose-bugs in Maine, 180; George Washington as a Rose-Grower—Winter Roses in Florida, 181; Rose Activities in Australia—Birds Enjoying the American Pillar Rose—The Rose in a Church Service, 182; Why Not Use the Bourbon Blood in Hybridizing?—That Model Back-Yard Rose-Garden—Roses in Mississippi, 183; A Rose-Garden in Sing Sing Prison, 184; "Some Growth" on a Silver Moon—A New Jersey Bloom-Record—The Puget Sound Rose Heaven, 185; A Rose-Hip Confection—Roses in South Africa—Getting Rid of Worms, 186; A National Garden Week Established—Protecting Climbing Roses in Michigan, 187; A Great Rosarian Gone: the Passing of M. H. Walsh—One Thankful Man, 188; New American Rose Books—The Park Value of a Rose-Garden—A Hugonis-Radiance Hybrid, 189; A California Success with Bicarbonate for Mildew—A Novel Suggestion for Rose Advance—Rose-planting by Radio, 190.		

LIST OF PLATES

	Facing Page
I. New Hybrid Tea Rose, Sensation	<i>Colored Frontispiece</i>
II. Dr. Edmund M. Mills, Honorary Vice-President American Rose Society	9
III. The "Favorite Dozen" Bush Roses	24
IV. The "Favorite Dozen" Hardy Climbing Roses	41
V. In the Rose-Garden of Charles M. Schwab, Loretto, Pa.	56
VI. The Hardy Climber, Alida Lovett (<i>In color</i>)	73
VII. Paul's Scarlet Climber (<i>In color</i>)	88
VIII. Field in a California Rose Nursery	93
IX. Where Grows <i>Rosa acicularis</i>	100
X. Frau Karl Druschki in Dunning Garden	105
XI. Wichuraiana Climber, Emily Gray	120
XII. Mons. Jules Pernet-Ducher	125
XIII. European Rose Snapshots	132
XIV. Air-plane View of Roseaie de l'Hay	137
XV. English Gold-Medal and Certificated Roses	141
XVI. English Gold-Medal and Certificated Roses	148
XVII. New English Rose, Vesuvius	152
XVIII. Unnamed Van Fleet Hybrid, <i>Rosa Hugonis</i> × <i>Radiance</i>	169
XIX. Model Back-Yard Rose-Garden	184



PLATE II. DR. EDMUND M. MILLS, Syracuse, N. Y., Honorary Vice-President
American Rose Society, President Syracuse Rose Society

THE AMERICAN ROSE ANNUAL

The President's Message to the Members

By ROBERT PYLE, President American Rose Society

FRANKLY, this is an appeal to you, reader, to personally participate in the pleasure that is bound to come from working with and for the rose. This pleasure is contagious, and it is also democratic, for the rose is no respecter of persons and she trifles not with idlers; but real folks who love beauty and who know the joy to be found in the heart of the rose, find fellowship everywhere on earth. Yet, in this year of 1923, so far, less than three thousand have sent us their names so that we may record their rose fellowship. Many there are to come, but even now in twenty-six foreign countries we have discovered them, and, of course, in every one of the states and provinces of America are these rose folks and rose groups who have sent in their cards to the Court of our Queen (i. e., American Rose Society headquarters). There are many more who would thus do honor to the rose if they knew—these folks who love roses when they see them—what is in store for them, with so little cost and care in this national and international rose fellowship. They would hasten to say, "Count me in; I'll help, for I know you will help me more." The great idea of the American Rose Society is in the mutual helpfulness among its members. They get, because they give.

The rose is potentially a blessing. For the American people it will prove especially so—and where, more than in America, has been better proved the untold value of the "each for all and all for each" idea? But we must get this idea "across" to our neighbors.

Dr. L. H. Bailey, editor of the *Standard Cyclopedia of Horticulture*, in a talk before a group of flower-lovers in New York some years ago, if I correctly recall, pointed out the historical fact that in a race or an industry a distinctly higher type of progress usually dates from the beginning of the creation of the literature of that race or industry.

The literature of the rose began almost with the written

history of man, but the stream of that literature has been intermittent. A study of the largest collections of books on the rose in American public libraries reveals two facts: First, that the publication of rose information, broadly speaking, seemed to come in epochs; and, second, that American publications of help to rose-growers have been very few at any time, until quite recently.

That situation is changing. Coming from the press today, in both magazine and book form, in addition to this notable Annual, is a literature of the rose both stimulating and definitely helpful. The work of the American Rose Society, backed by its individual membership, has contributed largely to the laying of this important foundation. More members are needed if we would build on this foundation and perfect the structure of real rose guidance for all rose folks. You help all rose-growers, therefore, when you help to get more members.

Let me point out the variety of opportunities for personal participation in rose progress on the part of nearly every member.

First: You will help if you will send to our Secretary the name of that person in your state best qualified to serve as your American Rose Society state vice-president. (We hope to announce these in the Members' Handbook.)

Second: You will help if you will send to our Secretary the name of any organization whose members you believe would be interested to share in the blessings of membership in the American Rose Society. Please also send the name of a responsible officer of that Society to serve as a member of our National Rose Council, and through whom we can introduce the subject to his fellow members.

Third: You can help, depending somewhat upon where you live, to enlist coöperation in the plans for, and actual participation in, one or more of the pilgrimages to public and private rose-gardens in June, 1923. These pilgrimages in the District of Columbia and in central New York have proved so delightful and so successful that we hope members will volunteer in such states as Massachusetts, Rhode Island, Connecticut, Pennsylvania, New Jersey, Ohio, Michigan, Indiana, Illinois, Minnesota, Washington, and Oregon at least, and, if possible, in

other states, to coöperate with their state vice-presidents in definitely setting aside a Rose Day on which rose-lovers may, in 1923, visit designated rose-gardens upon a time and programme prearranged, however informally. Your active co-operation will enable us to send full details of such arrangements to every member by the last of May.

Thus, after reading the announcement, those wishing to enjoy the pilgrimage among the rose-gardens of the Pacific Northwest, for example, can connect with the membership at Portland and visit Seattle, Tacoma, and other Puget Sound rose cities in succession, on an arranged schedule.

The success of this undertaking will, of course, depend largely upon the volunteer effort of those locally interested in rose pilgrimages by members and for members and their friends.

Fourth: Each succeeding season witnesses the growing popularity of local rose shows. This is as it should be. Has your community one? Perhaps you are the person to set in motion this annual affair, bound to grow and later to reflect credit on its pioneer promoters.

Fifth: No part of a public park does so much service to the public as that part in which is maintained a well-arranged municipal rose-garden. Is your community so provided? If not, start the movement in 1923. Our Secretary or our Editor will gladly give you help.

All the activities above enumerated are bound to attract new members. You should make it easy for them to join us. When, through more members, a rose show, and a rose pilgrimage, your community becomes rose conscious, it will become a better place in which to live. Then, with a municipal rose-garden, it will come to be a full participator in one of nature's best blessings—the knowledge and use and the joy of having beautiful roses. I hope that you, reader, may become an effective center of rose radiation.

I am glad to report, as the Annual goes to press, that we hope to present in the Members' Handbook the completion of the plans whereby the Mary Wallace rose, previously mentioned in connection with Dr. Van Fleet and the Department of Agriculture, may be introduced in the spring of 1924.

Roses as an Open Sesame

By RICHARDSON WRIGHT
Editor House & Garden

EDITOR'S NOTE.—No one is better able to tell of the position of the rose in the public estimation than the editor of a garden magazine. He is in daily touch with what the garden-workers say and think and want. Mr. Wright's novel point of view of the rose as a social flux is cheering.

THE other night I went to a dance. I don't especially enjoy dances. Terpsichorean accomplishments were never among my virtues. Consequently I faced a dreary evening sitting it out. My partner in boredom on the sitter's settee was a lean man from Chicago. We tried to make conversation on the weather, business, and prohibition, but it was visibly an effort. Our pauses became appalling. Finally a girl in a red dress passed—a pretty girl. She smiled upon us. Said I, "That girl's dress reminds me of Paul's Scarlet Climber."

"What's that?" the other dumbbell asked abruptly.

"Red; red rose—Paul's Scarlet Climber."

"What do *you* know about Paul's Scarlet Climber?" he demanded.

We have since become firm friends.

Several days later in a business conference, when things weren't going well, I tried Aviateur Bleriot; the results were amazing. Since then I have concluded that roses will get you in where angels fear to tread. The mention of a dahlia may have no effect; your casual remarks on the latest Arend astilbe may be received in frigid silence, but for an open sesame, give me the rose.

Now what's behind this? Why do people nowadays, when you mention a rose, say, "Oh, yes"?

Because the rose has become a part of a great many people's lives. Thanks to the American Rose Society's efforts, the rose has become a commodity like Ivory Soap and Campbell's Soups and Fords. At least, people are beginning to think of it as a commodity. When they reach that "Oh, yes" state of mind, it indicates that the rose has been accepted as one of the things that go to make up a fuller, more enjoyable life. It

transcends the limited realm of the garden hobbyist and attains a universal appeal. It no longer is looked upon as giving pleasure to the few, but is accepted as an object possible of giving pleasure to the many.

This, of course, is only a start, but it is a most important start; it is like having a principle accepted. Having shown the principle, you must teach the practice. Between saying "Oh, yes," when a rose is mentioned, and growing that rose lies a long trail. And I think it is quite necessary that those who know roses, who write or speak about roses, make an effort to explain to the beginner that the trail is not arduous.

The great trouble with the specialist is that, almost invariably, he makes his specialty appear difficult of accomplishment. He doesn't do this with malice aforethought; in his effort to attain perfection he tries every possible method that might prove of aid to him. The dahlia specialists, for example, have become almost esoteric in their endeavors to attain bigger and better dahlias. So, unfortunately, have writers on the rose. The layman picking up some of these articles is apt to be scared off. When he reads the intricate instructions about soil-preparation for rose-beds, when he sees the amazing number of bugs and diseases to which the rose may fall heir, he is—and no one can blame him—quite content to go on growing nasturtiums.

We very much need to simplify the instructions on rose-growing. We need a "Shorter Catechism" for these rosarian neophytes to learn.* In the last analysis, the preparation of a rose-bed is no more arduous or complicated than the preparation of the soil for a perennial border. It is no more difficult to feed and keep in health a clump of delphinium than it is a rose bush. In fact, plant physiology is not so different from human physiology: given a fairly good inheritance, ample and proper food and reasonable protection against the elements, the average human will manage to dodge a lot of diseases; given healthy stock, plenty and proper food and winter protection, the rose will manage to escape most of its enemies.

When this knowledge becomes more common, the rose will be an even more effective open sesame.

*Mr. Wright is referred to "Beginning with Roses," on page 43.—EDITOR.

The New Day of the Rose

By LEONARD BARRON, Editor *Garden Magazine*

EDITOR'S NOTE.—Closely in touch with the great gardening public is this editor, Mr. Barron. He sees, as his fellow-editors have seen, that great changes are coming about in roses and rose uses. The Queen of Flowers is indeed fortunate in having several prime ministers.

WHATEVER may have been the facts and conditions of rose-culture in America in the past, it is clearly brought home to us that at the present moment we are on the threshold of a new era. Just what the future will develop may be surmised by taking a look over the recent past.

The modern-day rose cult is almost synchronous with the era of the Rambler rose. During the last quarter century people have been turned more forcibly to the rose as a practical garden plant than ever before in the history of the rose in America, and it was the introduction of the Crimson Rambler and the Wichuraiana that brought about this interesting change. From that new starting-point we have been led to look at the rose otherwise than in the conventional manner, so that today we recognize it in distinct groups, each group and class having its own niche in the affection of the devotee, and each class and type filling its proper place in our gardens and grounds.

From all this I have derived great satisfaction, for "the more the merrier," say I, and I welcome the evident trend of fancy toward everything that the word rose may mean, whether it be as the cut-flower, for cultivation under glass, or for the bursting bloom of the Hybrid Tea in our outdoor gardens, or it may be the many species and forms that are purely of use for landscape decoration in the same way as any other flowering shrub.

It is a good thing, this getting back to first principles. The rose as it was had become a "race around the circle," ringing changes within a very narrow limit, but the introduction of new species from western China, in particular *Rosa Hugonis*, *R. Moyesii*, et hoc genus omne, have brought other ideals into our range. The future is pregnant with great things.

The new hybrids that are come from such hybridizers as Dr. Van Fleet, Capt. Thomas, and others have already lifted

the veil and given us a tantalizing, or shall I say appetizing, glance of what the future may unfold.

That we are at the parting of the ways seems evident. The old rose cult, the old type of variety, will go on and on, and as such will have its admirers and followers, and I would have it so indeed; but beyond and apart from this there is the vision of the new rose culture with these new types. In such I see free-growing, free-flowering shrubs with great wreathing and twining branches, of spectacular bloom—some large-flowered, some small-flowered—in great varieties of brilliant coloring, and extending through the season.

Of these things I see the vision; and I dream and imagine wondrous things to come in profusion of bloom, in color of flower, in landscape effectiveness, the like of which has not yet been. It is in this direction most definitely that the American rose must progress and will find itself.

Rugged roses for America's gardens being the ideal and goal to which we are driving, it will perhaps interest rose-lovers to turn and look backward, and in that way, in some degree, gain a measure of the progress that has been made. The hybrids of *Rugosa* and of the newer Chinese introductions with the *Multiflora* ramblers, of which mention has already been made, are all tending in this direction, and the outcome will be a new type of rose. It may even be as large a flower as the conventional rose of today which came to us from Europe, with European manners and habits and constitution, and which, despite all these handicaps, has survived in the affections of the multitude because of intrinsic beauty of the flowers produced.

In the face of all that has happened in the past, it is apparently evident that the people of America want roses, and will have them, and this turmoil of new strains will eventually lead us into the rose glory of the Promised Land.

The conventional popular garden rose, the product of cross inbreeding for many generations, had to be got away from, and the hark back to first principles—making a new break in an entirely different direction, or perhaps several directions simultaneously—which has been accomplished, may give future generations just as attractive, and, yes, sentimental a rose as of old, though possibly of a totally different character.

A Critical Period in Rose Development

By CHESLA C. SHERLOCK, Editor *Fruit, Garden and Home*

EDITOR'S NOTE.—In a lifetime of close connection with magazines, new and old, I have not before noted one which so quickly made for itself a place as has *Fruit, Garden and Home*. It "hit the spot" from its very first number. Its active editor, Mr. Sherlock, seems to know what we of the home want, and he puts it before us. For that reason his words on rose development are the more to the point.

But Dr. Van Fleet is no longer with us. Who will take up the work he was doing? Who will give us "dooryard roses" for the rose-hungry plain folks of America? Who will make it worth while?

ALL rose-lovers have every reason to be proud of the progress made the past few years in the development of newer and better roses, and in the wider dissemination of the old favorites which have proved their right to endure. It is a marvelous thing, this universal love every human being, from the creeping babe to those in the sunset of life, has for this, the Queen of Flowers.

And it is indeed more marvelous that this love should have been so deeply implanted in our hearts years and years ago, when about all any of us had was the old Prairie wild rose, or the hardy Perpetuals which grew in grandmother's garden. So it has been from the earliest hours of recorded history—the rose has been alike the flower of love and the flower of war. We can rest content in the thought that we are not singing the praises of something the masses are likely to be dubious about.

But we cannot continue to make progress in making every garden a garden of roses unless we do something more than trade on a bit of sentiment. We must afford a means of expression for that longing; we must go on with the good work which has already been undertaken, and we must do even more than has been done.

Not long ago a meeting was held in my native city by a number of citizens who were anxious to improve a certain city park in their section of the city. In the course of the evening's discussion, someone mentioned the fact that it would be a fine thing to have some roses growing in that park.

I was surprised to discover, from the comments that followed,

that the majority of the people present were of the opinion that roses would bloom only in the month of June, and that during the rest of the year they would contribute little or nothing to the beauty of the park. A number of dahlia fans suggested that dahlias would last longer than roses! Yet in several of the other parks and in private gardens in that part of the city mentioned, there were rose-gardens which throughout the growing season were constantly refuting this statement.

Many of us who are actively interested in the development of the rose, either through sheer love for it or for business reasons, are apt to feel that we have done about all we can do to inform the public at large concerning rose culture. In current language, we are apt to be "fed up" on the subject and assume that everyone else is. I hope that we do not—too many of us—get into that frame of mind. I hope we can continue to tell our friends, our neighbors, and our customers, over and over again, the old story that roses *can* be grown in the back-yard garden; that many of the same roses so attractively displayed in the florists' windows can be their very own, if they will only believe and try.

But the most critical need I see in the present stage of rose development is for roses which shall distinctively belong to the gardens of the Smiths, the Sweeneys and the Joneses. By that I mean roses for the great class of average people living in average homes on average lots, people who cannot afford the luxury of a greenhouse in which to develop the exquisite Teas—people who generally live in a climate where the Hybrid Teas are not especially successful. They want roses which will grow in their gardens, but which will produce bloom for them with the lavishness of the Teas and Hybrid Teas. They want continuous bloomers.

I know that we have a few of these now; indeed, two or three of the Hybrid Perpetuals are now doing yeoman service along this line, but they are not enough. And they want climbers of greater stamina and less susceptibility to mildew and disease pests than some of the older varieties; in other words, dooryard roses of the hardiness of the old Prairie roses, but with all the quality and texture and fragrance of those they see in the florists' windows, plus an ability to produce


throughout the season. Many of these newer roses are already awaiting distribution, and many more are being produced. But we must not be too slow in getting them to the people who need them and want them.

For some time now, the chief effort has been to produce gems for the professional rose-grower. I have no quarrel with that work, and I am not seeking to belittle it or the roses which were developed in that stage. There were good reasons why they should be developed first, but if we continue much longer along that path we are going to find increasing numbers of our people leaving the ranks of the rose and joining some other. Our job does not end with the mere development of roses which will meet their demands; we must likewise inform the average "back-lotter" of the good news, take him by the hand and actually lead him through one successful season with them.

In other words, we must popularize our roses among the masses, and we must continue to do it, with increasing effort. We must not permit these people to feel that, perhaps, the rose after all "is not for them."

I hope I do not seem critical of the good work already done by the rose-breeders, growers, and jobbers the country over, for it is not in this spirit that I write. It is only in a desire to pass on to all of you some of the sentiments which some of the Smiths and the Sweeneys and Joneses have expressed to me.

To the American Rose Society and the great work which it has done, and is doing, I can offer the heartiest praise. It is a particular pleasure to know that through this organization the great Van Fleet roses are to be offered the American public. Some of these roses fill the very need I have been discussing, and I know that in your hands the good work is going to meet the fullest success attainable.

 *The ROSE NOTES found in later pages of this Annual contain matter of great value.*

Who Will Make New Garden Roses Worth While?

By ROBERT PYLE and J. HORACE McFARLAND

AS THE RESULT of verbal and correspondence discussions, the President and the Editor have collaborated in the following hopeful statement. It is believed that the great need we set forth provides a great opportunity.

Consider the situation relating to the better garden roses needed in America, as it may now be studied in the light of the notable referendum reported in this Annual. We now know what varieties have made good in every section of broad America.

The continual failure of foreign originations to be of general usefulness here, joined to the continuing introduction from abroad of sorts made in the old way without new blood, and differing little, if at all, from those previously sent over, clearly indicate the need for action in America. That only three of the "Favorite Dozen" bush roses are of American origin, while nine of the "Favorite Dozen" climbers are native-born, further emphasizes this situation and increasingly points the way.

Let us look first at the bush-rose situation. Our American workers in Hybrid Teas, seemingly using no new blood, are, with one exception, working intensively and successfully toward the production of larger and better-adapted forcing roses for the cut-flower market. Their able efforts relate to points of blooming, persistence, stem, foliage, and other details that have but little to do with the garden, and when one of these super-roses does escape into the garden, as in the case of the favored Columbia, it is by accident, and not of design.

It is true that one most capable worker, F. H. Howard, of Los Angeles, Calif., is producing American garden roses, but he is only making more adaptable Pernetianas for America than Pernet-Ducher himself can send over.

It is further true that even with all these successes in the greenhouse field, the dependable clear yellow Hybrid Tea and the wholly satisfactory pure white Hybrid Tea are yet non-

existent. Nor will the eventual user care what the parentage is; it is the roses he wants.

So here comes our first great need—that of broadly dependable, good-looking, hardy, everblooming garden roses, disease-resistant and totally different in appearance from the conventional Hybrid Tea bush, which, aside from the lovely flowers it bears, no one would look at a second time.

There is an almost total cessation of breeding with the *Rugosa* resource, which for some time gave superb results. Aside from an overlooked hybrid made by Dr. Van Fleet, much resembling F. J. Grootendorst, and from several other *Rugosa* hybrids, also of his production, not yet known or named, America is silent on the splendid *Rugosa* possibilities.

Nor has any American hybridizer experimented with the Bourbon class, within our knowledge. Why not use the lovely *Souvenir de la Malmaison*, now eighty years old; why not avail of the hardy and persistent *Hermosa*, still older, and of *Zephirine Drouhin*, now tried for fifty-five years?

If it be admitted for the moment that there are parts of the country in which the *Rosa chinensis* blood of the Hybrid Tea strain will prevent hardiness, and if it is cheerfully admitted that the great June burst of bloom of the Hybrid Perpetuals is worth while without recurrent blooming, then it must also be admitted that we are not getting any better Hybrid Perpetual roses, less leggy, more shapely, more disease-resistant, and fit to be used as garden shrubs. Nor are we getting yellow roses in this great class.

America has not touched the potentialities in the Polyantha class, which might easily bring us the good-looking, hardy, everblooming bush rose.

Who has considered the wonderful opportunity open in working with the Moss rose? Aside from the *Wichuraiana* hybrid, *Wichmoss*, sent out a dozen or more years ago by the French hybridizer, Barbier, no one seems to have thought of getting long buds of better color, decorated with fragrant, mossy appendages. Why not a yellow Moss rose, too?

That the "Favorite Dozen" climbing roses include nine of American origin, and that of these nine at least two are favorites also in England and in France, proves that we can

do good things when we try. Capt. Thomas has made what he does not consider very adequate progress toward an ever-blooming hardy climber, but his is the only effort.

Now why is there this lack of progress in America toward the production of better outdoor garden roses?

The answer is simple. It does not pay to produce a good garden rose for outdoors. The winners in the greenhouse field promptly upon acceptance are demanded by the thousand and the ten thousand, and there is support and a decent profit in the production of these roses.

But nobody has yet made a dollar, or much more than a dollar, in the production of a garden rose. There is no adequate reward held out, either of cash or of honor.

It is on record on page 17 of the 1922 Annual that for the rose which he wanted to call "Daybreak" but was later named for him, Dr. Van Fleet was paid the vast sum of \$75, while for Silver Moon he got \$100! American Pillar brought him about the same sum. Each was the result of a lifetime of intensive preparation, and directly of years of watchful cross-breeding, selection, and cultivation. There would be no Van Fleet hardy climbers on the market today if the good Doctor had been a good business man. The American Rose Society would not now be reporting its favorable negotiation with the Department of Agriculture for the splendid things resulting from Dr. Van Fleet's last efforts, if it were not operating in a philanthropic way, and if the Federal Government were not aiding at its own expense. No man can at this moment make even a living producing good garden roses for America.

What is the situation abroad? The great rose-raisers who send out each year the new varieties, principally of Hybrid Teas, are the great nurserymen. For their new things there is a wide market, and it pays at least a reasonable commercial profit, not paralleled at all by anything possible here or likely to be possible. No great nurseries in America are hybridizing roses. They think it doesn't pay!

Consider the Walsh climbing roses, many of them of the utmost value and importance. They were the result first of the fostering support of Mr. J. S. Fay, who was Mr. Walsh's early employer, and later of the single-minded devotion of this genius

to the work he loved. They possibly paid expenses, and no more.

So we have stated the condition and the need. Now we may set forth the splendid opportunity.

In the membership of the American Rose Society, and among the increasing army of garden-lovers not yet in the Society, are many men and women of large means.

As one means to promote the production of rose varieties with new possibilities in America for American gardens, we venture to hope that some of these well-to-do people may set up definite rewards to be striven for. If there existed an offer of \$500 or \$1,000 for the production of the better garden rose we need, good-looking, hardy, everblooming, adaptable; if there was hanging up a prize of \$500 for a really dependable yellow outdoor rose; as much for a better Hybrid Perpetual or Hybrid Rugosa; an equal sum for a definitely worth-while American Polyantha rose, or for a long-budded or yellow Moss, and double as much for the everblooming hardy climber, we believe a keen American breeding effort would arise.

Such awards ought to be made possible in such fashion as only to be available when worthily earned. The American Rose Society is now strong enough and broad enough, and, we believe, wise enough, to erect a Committee of Examining Rosarians who could justly handle competitions.

When one considers that to earn a first prize of, say, \$250, a commercial florist will easily spend \$2,000 in preparing roses for one of the great spring flower shows, it can be noted that the incentive here proposed has shown its power to excite endeavor as much for the honor involved as for the money possible. Honor alone will not do it. Honor and money may!

Who among the members of the American Rose Society will offer, under conditions to be agreed upon, such \$500 and \$1,000 units as are here proposed? Who will care thus to have his or her name, possibly, attached to the winning rose, engraved in rose history, planted in rose-gardens, all over this great land? Who now knows who General Jacqueminot was, but who can forget his name, alive today on a good rose named for him just seventy years ago? What monument so enduring; what memorial so permanent!

Choosing Roses Intelligently

By CAPT. GEORGE C. THOMAS, Jr.

Author of "The Practical Book of Outdoor Rose-Growing"

EDITOR'S NOTE.—No amateur in America has given to the rose within the last fifteen years such closely intelligent study, investigation, and observation as has Capt. Thomas. He has the great advantage of having maintained a large rose-garden near Philadelphia, in which were all the varieties obtainable anywhere, and of having established later near Los Angeles another great rose-garden, giving him knowledge both east and west from direct personal contact.

Further, Capt. Thomas has done much careful hybridizing in his search for the everblooming hardy climber. The exquisite rose named for his mother, Mrs. George C. Thomas, took all the high honors in 1921 at the Portland (Oregon) International Rose-Test Garden. His Dr. Huey is rapidly becoming a prime favorite as a pillar rose in the East, because of its unique deep scarlet blooms. (Both have been shown in color in former issues of the Annual: the first as Plate XIII in 1922, and Dr. Huey as Plate VIII in 1920. The Editor has likewise shown the latter, as grown in his own garden, on the cover of "The Rose in America.")

Now Capt. Thomas has been working out with the utmost care the factors of rose value, in the idea of providing a basis for selection that would save money and prevent failures in rose-growing in every distinct section of the United States. This basis is here presented.

TAKING up the dwarf or bush roses first, the worth-while class is the Hybrid Tea. There are some Hybrid Perpetuals, Teas, Chinas, Bengals, and the like, which are worthy of consideration, but the Hybrid Teas are the main class of merit.

In the discussion which follows it must be noted that each main division of the country overlaps the neighboring section, for it would obviously be impossible to stop each zone at a given geographical point and start its neighbor across the street. Climates vary, but if the main principles which lead to the selection of varieties for the varied districts are studied, each grower should find it easy to select for his location.

THE NORTHERN SECTION. The first list study is for the northern part of the country, comprising the northern part of New England and New York, Illinois, Minnesota, the northern part of the Middle West and like cold winter districts, in which must be included mountainous regions in more equable zones.

The climate of the country surrounding the Great Lakes

seems to be very trying, as noted by W. C. Egan, of Chicago, in his writings, and also by G. A. Stevens, of Cleveland.

Roses differ in different locations; in Minneapolis, for instance, the Superintendent of the City Parks is quoted in Mr. Pyle's excellent book, "How to Grow Roses," as recommending Mary, Countess of Ilchester, for his section, and this is borne out by our experiments in Pennsylvania, where Ilchester had from 8 to 10 inches of living wood in the spring; yet Ilchester is not suggested for Chicago or Cleveland by growers there.

On account of these varying results, it is advisable, except in the most extreme climate, to try only the best of the Hybrid Teas, and to give thorough protection in sheltered locations.

Hybrid Teas are successfully grown in Quebec, in Ontario, in Minneapolis and other northern situations, but they must have adequate protection in winter. In this connection, proper drainage is of the utmost importance. In beds which become even partially water-logged, there are many more deaths from cold.

In these northern regions, the main consideration is hardiness; that is, ability of the plant to withstand the cold of the winter. It is usually found that roses which do not kill back in Pennsylvania below 8 to 10 inches do well in this northern section, while those which killed back in Pennsylvania to within a few inches of the ground were uncertain further north, and those varieties which killed back clear to the ground, and barely came through near Philadelphia, were absolutely worthless in the northern division.

In good practice the bud is planted between 2 to 3 inches below ground-level, and if it lives will send forth shoots of the budded kind. So that, provided the bud itself lives, the rose will grow and produce blooms each year in most dwarf varieties.

The next difficulty to be faced in the north is the "balling" of roses; that is, the failure to open, partly owing to cold and dampness. While it is true that extreme heat is found in these northern districts in summer, nevertheless, owing to its short period and the generally cooler conditions in spring and fall, roses with a less number of petals, and even semi-double kinds, provided their petals have good substance, do better than roses of heavy petalage.



PLATE III. The "Favorite Dozen" Bush Roses

1, Gruss an Teplitz, HT.; 2, Duchess of Wellington, HT.; 3, Kaiserin Augusta Victoria, HT.; 4, Killarney, HT.; 5, Radiance, HT.; 6, Los Angeles, HT.; 7, Ophelia, HT.; 8, Mme. Edouard Herriot, Per.; 9, Columbia, HT.; 10, Frau Karl Druschki, HP.; 11, Mrs. Aaron Ward, HT.; 12, Sunburst, HT. (See page 42.)

(Reprinted by permission from "The Rose in America," by J. Horace McFarland.)

The third condition most important for this zone is that varieties must be chosen that are not ordinarily susceptible to mildew. Owing to the shorter growing season in this section, roses which lose their foliage early are not so objectionable as in other districts.

The requirements, then, for this northern section are clearly and easily understood. Extreme hardiness, freedom from balling, immunity from mildew, and the acceptance of roses of light petalage with good substance, and of those which lose foliage early.

The best time to plant in the northern section is in the fall. It is generally admitted that if set out in the ground at this season, roses throw out little fibrous roots which, while they do not promote any growth during the dormant period, nevertheless establish the plant and in the springtime are ready to throw sap to the branches above. Plants put out in the fall will therefore make a much quicker and stronger growth than roses set out in the spring following. In this connection, it is most strongly urged that all roses which have been carried over the winter in greenhouses be eliminated from consideration. Such roses have caused more disease in rose-gardens than almost any other one factor. Black-spot seems to thrive on such roses, and a whole garden may be infected with the disease from a few potted plants set out in the spring. If one visits the fields of the nurseryman in the late summer or early fall, the qualifications of roses will be easily ascertained. Foliage mildews quickly at this season, or may be showing black-spot or loss of leaves, if the plant is susceptible. Nearly all kinds without continuous bloom are barren at this time; the days are hot enough to make such roses as fade or blue show their faults, and the nights are cool enough to encourage balling in varieties addicted to this deformity, although the late fall will bring out this characteristic even more.

These hints are given for the average home rose-lover, but even persons with large rose collections will do well to consider them before purchasing new varieties. Remember that practically all new varieties come from different sections of the country to your own; that even if the new varieties are grown in the sections where they were bred, they may not be valuable

in your district. Among hundreds of new roses, less than five per cent are distinct, and less yet really valuable.

If one desires to consider new roses as they come out each year, such should pass an examination. Are they extremely hardy against cold? Will they ball because of their heavy petalage? Is their foliage thick and varnished and dark in color, with good substance, and not thin and soft? After the winter, is it killed back to the ground? Note during damp, rainy weather: does it ball, does it mildew? Watch it in hot weather: will it open too soon, or will the color fade, in a light variety, or the rose quickly become purple, if a red one? Does it lose many of its leaves before fall? If the grower is not sure of these points, he takes a gamble on new varieties, no matter how well recommended. Far better to see the rose growing in your own neighborhood at the nearest nursery.

THE MIDDLE ATLANTIC STATES include climates approximating their conditions. While in the extreme north the thermometer often goes below zero, in this zone it very seldom does so for any considerable period. Therefore, extreme hardiness is not so absolutely essential. Balling does not occur as frequently, owing to the warmer and longer summer, but it may be an evil in early and late seasons. Here, as in almost every district, mildew must be carefully considered. Loss of foliage becomes increasingly disappointing. Roses with light petalage are not as valuable as in the first district, and those which fade and blue are less desirable. In the northern part of this district, one must closely approach to the qualifications mentioned for the northern section and in the southern part, one may use the hardier sorts from the next section. The grower should know his winter conditions, and if the thermometer goes well below zero in mountainous parts of this region, he must revert to the hardy roses as specified for the more northern zone.

Roughly speaking, this territory embraces Long Island, southern New York, Pennsylvania, New Jersey, and Maryland, the seacoast as far north as Boston, and other sections of the country south, east, and west, with approximately the same amount of cold and about the same length of growing season. Roses commence blooming here from May 10 to June,

depending upon the locality and season, and last until repeated light frosts, generally the last of October, but occasionally bloom as late as December, if the winter is backward.

Roughly speaking, the cold extremes in the various sections would approximate as follows: In the northern section the thermometer will go well below zero for long periods. In the central sections 10 degrees below zero would probably be the minimum. This would only occur for short periods, while the general low level would hardly approximate 10 degrees above zero. Below Washington, a temperature of 20 degrees above zero would be the general low level, with colder periods of short duration.

In the Northwest, the minimum would be approximately the same as in the central districts, but all cold periods would be rare and of less duration. In the Southwest, as in the South, 20 degrees would be the low point, and the cold periods existing in the mountains would be short.

In Texas the low point would be about 20 degrees, but the danger in this climate is that after a warm growing spell in the late winter or early spring, a sudden cold snap accompanied with heavy winds is most detrimental to plant-life.

In this arid district there are continued periods of great heat and dryness.

SOUTH OF WASHINGTON. Here we take up the great territory south of Washington in the east and central zone. There is, of course, some diversity in the conditions of this district. But hardiness against frost is of little moment, as nearly all varieties can withstand the lowest temperatures. Balling causes less dissatisfaction than in the North, owing to the greater amount of heat, although in spring and early fall, this characteristic will be noticeable in varieties of too great and close and thin petalage. Mildew likewise causes less trouble in this zone, but light petalage and the bluing of the red and pink rose is a much greater evil, and retention of foliage is a very important virtue. As one journeys further west in this southern zone, growing weather in late winter and early spring is often followed by cold periods sometimes accompanied with frost, an evil to be carefully considered. Therefore, the south-

ern section is confined to the seaboard states except where this condition is not found.

THE PACIFIC NORTHWEST includes Washington, Oregon, and northern California, especially near the coast where the large rose-growing centers are located. Hardiness figures to some extent, the thermometer being the guide to follow. Balling is an evil of moment, owing to the cool conditions. Mildew is also an extremely important factor, on account of the dampness, which in this district is often in the form of fog. Lack of great petalage is of little moment, even in kinds somewhat lacking in substance of petal elsewhere, because the conditions are so favorable for rose-growing that kinds which in the humid East show lack of substance are here of sufficient thickness of petal. The conditions of this district more nearly approach those of the best in England, and the climate is especially adapted to rose-culture. Hybrid Perpetuals give a splendid continued bloom not obtainable elsewhere in our country. Thin roses, which become flat in the hot eastern summer, are here of much better form. For the same reason, fading is not as great an evil as in the East, and even bluing of roses seems to be less noticeable, nor is loss of foliage as frequent. Outside of balling, made possible by the cooler conditions, especially at night, and the most tender roses, it is easier to exclude good ones here than to include bad ones. (The interior mountainous regions of this section must be considered the same as other mountainous districts elsewhere and a hardier list used.)

THE CALIFORNIA COAST region comprises the central and southern California seacoast section and southern parts of the state which are receiving ocean influence. In this connection the ocean fog, which is commonly known in this district as "high fog," not only protects the bloom itself from the direct heat of the sun but the moisture and the dampness and the resulting coolness materially aids the growth of the plants. The distance from the coast which the ocean influence penetrates is regulated more by regional topography than by actual distance in miles. In some places where there are high hills directly on the seacoast, a region east of such high land will be entirely shut off from ocean influence, whereas in another

section where the land is low, a district 25 to 30 miles from the ocean will receive great benefit from the high fog noted. Again there are openings through such ranges of hills where the ocean coolness penetrates and reaches valleys apparently cut off by the low mountains. The grower should know whether he receives the ocean influence or not, as his selection of roses should be governed thereby. If he is on the coast or receives the ocean influence, he will have more mildew, his roses will be more likely to ball, but he will have the advantage of being able to grow thin roses. Further, his beautiful light-colored varieties will not fade as they would in sections where the ocean influence does not penetrate, and he can select his varieties accordingly. Per contra, if he is not within the "high fog" belt but subject to the heat and dryness of more inland conditions, he need have little fear of mildew and balling, but must beware of fading, bluing, thin roses, and is more likely to lose foliage.

Here, as in other sections, altitude affects the situation, and the rose-grower must consider his maximum cold. As a general rule, winter-killing does not occur below 3,000 feet elevation. Mildew and balling are evils which are felt mostly in winter and early spring; in the fall, before the winter fogs commence, they are of no moment. Lack of petalage, even though the rose has substance, is a great evil in summer. Loss of foliage is a most important consideration. In this connection, it is well to note that roses grow continuously in the seacoast and other regions of low altitude in California; yet for the proper growth of the plant, it must have a dormant period. If water is withheld and forced dormancy occurs during the dry season, it should be prolonged for at least six weeks, after which the roses should be lightly pruned and dead wood removed, and in due course of time the fall bloom will commence. Later in the year, in January, the rose should be more severely pruned and from March on it will supply continuous and beautiful blooms until the dormant period again sets in. (This pruning does not apply to climbers and special classes.)

The Pacific Northwest has been often quoted as the ideal climate for the rose in this country, although some contend southern California is a better location. As a matter of fact,

the Northwest has a shorter period of greater beauty in the varieties suitable to its conditions, and the Southwest excels in longer periods of bloom and with the possibility of growing more delicate roses, such as *Maréchal Niel*, to a fuller beauty. The wonderful Climbing Teas and Noisettes are particularly fine in the southwestern section, and although, with protection, they may be grown in the Northwest, nevertheless, the frost will occasionally set them back, and they will not be as beautiful as they are in the more southern climate. Both these districts are far superior to the other four, and it is more a matter of personal liking than of argument as to which is best.

THE CENTRAL SOUTH is that vast area from the central eastern South to the western seacoast South, where a loss from cold after growing weather is one of the great problems. Texas and southern Oklahoma are examples of this climate. This division requires hardiness of a special character. Great heat and great dryness render full petalage and substance a necessary requisite. Heavy winds are a serious factor. Loss of foliage is very objectionable, but mildew is only prevalent at certain seasons. Where heavy winds and such cold snaps do not prevail, roses for the district south of Washington may be used if of sufficient petalage to withstand the dry heat.

In addition to this, some roses seem to die back in the summer in this climate more than they do in other zones, although such roses are generally found to be slightly susceptible to this fault. Particularly in the east and south is this true of *Pernetianas*, some of which are useless here. This district runs close to the southern seacoast on the west. As an example of this, take Pasadena and Santa Monica in southern California, which are less than 30 miles apart. *Gloire de Dijon* in March in Pasadena is truly a glory, owing to the heat and dryness. On the coast in April it is so balled as to be a different rose. *Irish Fireflame* is the opposite, opening too quickly and losing color at Pasadena in the spring; it has neither fault near the ocean. Pasadena is not typical of the sixth district nor is Santa Monica of the fifth, for Pasadena has not the extremes of the sixth zone, and Santa Monica is so close to the ocean as to have more dampness than the average of the fifth section; yet the difference in the conditions of these

two locations is very great. More marked are the differences between the fifth and sixth, both of which commence within a few miles of Pasadena.

Now that the main faults in roses have been set out, and the reasons for them explained as influenced by climate, it should be practicable for rose-growers throughout the country to select those varieties which are best adapted to their special conditions. The importance of considering the various factors is so great that they are below again enumerated, with those climatic influences which aggravate them.

Hardiness is considered as cold-resistance. The danger is of extreme cold, or of heavy frost after early, tender, forced growth, following warm days.

Mildew is a fungous growth on foliage, increased by dampness during the growing season, and by cold nights and warm days with high humidity. It is most prevalent in varieties with thin leaves which lack substance.

Loss of foliage is made more objectionable where there are long growing seasons. Dormant periods in the all-year climate of the Southwest cause natural loss of foliage. Roses especially susceptible to black-spot are included in this fault.

Balling is caused by cold and dampness. The bloom does not open, and sometimes rots; the fault more often occurs in tightly rolled buds, with heavy petalage and lack of substance.

Loss of form and color from opening too quickly is the opposite to balling and is caused by heat conditions affecting roses of scanty petalage, especially those which lack substance. Great heat also reduces size in roses and hastens their maturity.

There are minor evils, such as roses having short stems, which are therefore not good for cutting; roses with weak necks, which cannot support the weight of the blooms. Lack of perfume may be considered as a fault, and roses which are not sweet should not be grown unless for some other important reason, such as individual color or form.

The substance of the petalage is important. Roses with many petals usually lack substance, and where they undergo damp conditions, do not open readily. The most valuable rose for all conditions is one with a medium number of petals of good substance. Where the petalage is light, as in *Duchess of Wellington* or *Mme. Mélanie Soupert*, the fine substance of the petals gives lasting quality to the blooms after they are cut.

Petalage is generally described as to number as follows: A "single" rose is one of 4 to 10 petals; a "semi-double" rose runs from 11 to 25 petals; beyond 25 petals the rose is called

“double,” while if they run to 50 or more it is considered a very double rose. The number of petals varies at different seasons of the year and under different conditions; extreme heat and dryness reduce the total.

The texture of the leaves is as important in regard to foliage as the substance or thickness of the petals is in connection with the bloom. Usually a thin, soft leaf is susceptible to mildew, and a glossy, thick leaf is resistant to its effects. As a class, the Tea rose resists mildew and black-spot better than any other. Black-spot is caused by a growth within the texture of the foliage, and, as the name implies, shows in little black spots which spread over the foliage, eventually causing it to die and fall. Roses of Pernetiana breeding are mostly susceptible to it, but many others are afflicted. It is a much more serious disease than mildew.*

There are extant persistent and often unauthenticated rumors regarding virtues and faults in roses. For example, one hears that some Wichuraiana climber has bloomed in the fall as well as in the spring in a certain location. This does not mean that this rose will bloom a second time in every location; such second blooming is either induced by climatic conditions near the seacoast where the coolness and dampness induce a second bloom, or else is caused by a difference in growth, in the nature of a sport or bud variation. In either case a rose of the same name may not give like gratifying results elsewhere.

While it is true that roses vary in different locations, their faults, if faults of constitution, will generally be found the same in most districts; for example, a rose susceptible to mildew in one location may prove susceptible in another section, though in a varying degree.

In the coastal section of California, rose perfume is perhaps greater in volume than for the same varieties in the East. Under adverse weather conditions, particularly of great dryness and heat, a rose will not give as much perfume as it will under more favorable conditions. The cool nights of the Northwest and Southwest aid a rose to produce more perfume.

The size of the bloom and the growth of the plants vary

*Complete directions for recognizing and controlling black-spot were printed in an article beginning on page 77 of the 1922 Annual. The same treatment controls both black-spot and mildew.—EDITOR.

considerably under different conditions. Duchesse de Brabant is a very good illustration. Grown near Philadelphia, it was discarded as useless, showing weak growth and very few blooms, though it lived. North of Philadelphia, it is doubtful whether it would do more than survive the winters. Further south, in Washington, it is quoted as giving 47 blooms per plant throughout the season, and is a fair decorative rose. In California, it grows to a very large size, gives fine large blooms with about 50 on the bush at one time, and is a wonderful decorative rose, blooming constantly for months. Illustrations of this kind could be multiplied indefinitely.

Roses that tend to ball and are prone to mildew should be given a situation with the most heat and sun, while those which lose foliage early, or which open quickly and soon fade, should be planted in a situation without too much direct sunlight; often good results are obtained in partial shade. In southern California, roses may be planted among other bushes shrubs, and trees; the tree roots do not affect them here.

THE CLIMBING ROSES

Nearly the same rules apply to this class as to dwarfs. Perhaps balling and fading count for less because climbers are mostly used for garden decoration, though growth and foliage, on the other hand, are more important as they are more apparent. In the northern and central zones supreme hardiness is required. Except in a cool, moist coastal climate, the hardy climbers seldom give a second bloom anywhere. Long Island and the coastal region of New England in the East, and northern California, Washington, and Oregon in the West secure results with hardy climbers not obtainable further inland.

The choice of climbing roses for the North is confined to a small list in which absolute hardiness is the first quality. Because of the winter-killing of the canes above ground, destroying the bearing wood of the rose, hardiness is even more important than in the dwarf section. A dwarf rose gives bloom not only on wood of the preceding year, but its best bloom is furnished on wood of the current year, whereas on most hardy climbers, no bloom is furnished with current-year

wood, but all bloom comes from canes of former years, the best bloom being often produced on the new shoots of the previous season.

In the central zone, by the same token, hardiness is also given more importance than for dwarfs, but in this section roses susceptible to frost further north may be grown, and therefore, the choice of varieties is greater.

The best of the Wichuraianas, and the hardiest of the Climbing Teas, Noisettes, and Climbing Hybrid Teas provide a fine assortment to choose from.

South of Washington the possibility in climbers is greater still, and the hardier varieties grown further north, which do not compare in beauty or length of blooming season with the more tender kinds, are unnecessary, although they may be used. In this section the same rules which apply to dwarfs apply to climbers, with a premium on varieties which retain foliage.

The Northwest may grow almost anything in climbers except the most tender Climbing Teas, Noisettes, and the Cherokee; even these may be tried provided the grower is willing to give winter protection and to experience occasional loss from frost. The other characteristics required are the same as for dwarfs.

In the southwest seacoast section is found the best situation for climbers. It is merely a case of choosing those which one likes, with due regard to mildew and loss of foliage, balling and fading depending on nearness to ocean influence. The wonderful tender climbers of southern France are in their glory here; no other zone can compare with this for everblooming climbers. It is remarkable how Teas and Noisettes flourish with apparently no care and no season of rest. The great trouble is that under such conditions the growth becomes crowded; otherwise, they thrive and produce blooms throughout nearly the entire year.

It is most important to select climbers which do not mildew. It is also necessary, for the best results, to choose roses of medium petalage, with the exception of Teas. Thin varieties open here too quickly in summer, if in sunny locations, and roses which ball are disappointing in winter although planted

in the sun. The Noisettes and the Polyantha, Climbing Cécile Brunner, are incomparable.

Texas and like regions in the sixth section require the same virtues necessary for dwarf varieties, the holding of foliage being as important as in the Southwest.

In all these sections, a great deal may be done by careful winter care and protection, and by selecting the best situation for the more tender varieties. For example, one man in Philadelphia was able to grow Cherokee roses because he had a southerly exposure with terraced grounds on a hillside. He planted his Cherokee behind a stone wall, gave it the most thorough winter protection, and having splendid frost drainage obtained by his sloping ground, was assured of the minimum of frost, while a hill in the rear protected his rose from all cold winds. This is an extreme case, but proves that the more tender varieties of climbers may be grown from New York southward with care and in favorable situations.

In the Northwest, even the most delicate varieties may be grown with such care. One northwestern writer claims to be able to grow everything but Cherokee, although there is no question but that plants will not do as well as in more equable climates, and the grower must expect disappointments.

In all sections, except the sixth, where they may be grown, the Hybrid Tea climber will be found to mildew, often badly. Their blooms are so beautiful, however, that they are well worth cultivating. Every one of them should be given a sunny, ventilated location and be watched most carefully for mildew, preventive measures being taken immediately upon its appearance. While these roses are most beautiful, they are perhaps the most disappointing of any type in the Middle Atlantic zone, and this has also been found true in published reports, not only in the English "Rose Annual," but by observation of them in Europe and by information received regarding them even as far as Australia. For this reason the number of available climbing Hybrid Tea roses are few. Some varieties tend to revert to the dwarf form from which they originated, or else are shy on bloom.

As in dwarfs, each district overlaps regarding hardiness. It will be found that descriptions of roses as grown in Eng-

land and France are not accurate in this country, and this is especially noticeable in reports of hardiness abroad.


In the mountainous regions of California, the climate is extremely cold in winter, and it has been found that it requires the hardiest climbers to survive at an altitude exceeding 4,000 feet. Under 4,000 feet, with careful protection, Climbing Cécile Brunner, William Allen Richardson, and Fortune's Double Yellow have been successfully grown where the extreme in winter is zero. In one particular case the roses were surrounded by buildings in a secluded courtyard, and thereby protected from all high winds. Maréchal Niel has been grown in Washington state by careful protection. The more tender climbers should always be given the preference of location. Northern exposures will naturally be found to be more trying on roses susceptible to mildew. In planting a climbing rose next to a wall, use a trellis, or some means of giving the plant air-space between it and the wall. All Hybrid Teas, and particularly Climbing Gruss an Teplitz (which is the hardiest of the Hybrid Tea climbers), must, if possible, be given a situation with a sunny exposure to minimize mildew.

Remember, however, that roses vary; they may do so not only on account of the situations in which they are planted and the soil and care which they receive, but, in addition, different plants vary. Because you see one rose of a certain variety doing well in your immediate neighborhood, do not consider this as a conclusive test. It is far better to see many of the variety growing in the field of the nurseryman from whom you propose to purchase it.

It would seem that the time had gone by when the so-called decorative roses should be considered to any great extent for small grounds. Certainly the home rose-grower with limited space should not plant them. Roses good for cutting are also decorative, and by planting the number of bushes needed to give the desired quantity of blooms, one keeps the bushes in proper shape as the flowers are cut. Decorative roses are of little value in the house. Their stems are often short or weak; their petalage is thin; they open quickly and fade early; many have little or no perfume; they require constant trimming or the bushes will look badly, and there is little reward for much

pruning. Outside of special uses, on large places or in collections, it is best to plant roses that are of some value for cutting. One of the greatest joys that the flower-lover has is the production of beautiful blooms to take indoors, or to send or give to friends; therefore, plant varieties to give this pleasure. Who would not rather have twenty-five Ophelia, perfect as cut-flowers, than a hundred Johanna Bridge? Who would give one Laurent Carle for ten Gruss an Teplitz? Every time one sees a plant of Red-Letter Day he is disappointed that he cannot cut the flowers. Gruss an Teplitz is by all tests the best decorative Hybrid Tea rose for hedges or a display of color, and what applies to it applies with even more force to the rest of the decorative class.

The fewer the number of roses you are going to plant, the more carefully should they be selected. Long-stemmed varieties of fine form with lasting qualities and perfume are the cutting requisites. Remember that the reds as a class give wonderful perfume. One Laurent Carle will scent a whole room. Of the pinks, La France stands almost supreme, although many other varieties may be recommended. Yellow roses do not give as pleasant perfume as the reds and pinks; their odor is not attar of roses but usually more on the order of a spice. This is particularly true among the Hybrid Teas, but yellow Teas have delicate and lovely perfume. Ophelia, among the light-colored roses, is the best for perfume of the finely delicate shades. The quality and amount of perfume in roses varies greatly.

 In connection with Capt. Thomas' critical discussion, the reader is referred to the immediately following article, "The Favored Roses of All America," which provides dependable selection of varieties, and to Mr. Gersdorff's accurate descriptions and bloom records of over a hundred varieties.

The Favored Roses of All America

A REFERENDUM REPORT

FOR several years it has been the custom to submit questions of rose interest and importance to the members of the American Rose Society, through return post-cards, either inserted in the Annual or separately mailed. These questions have been formed in such a fashion as to make definite reply convenient, but it has been noted that the habit of reply had to be established before a truly informative conclusion could be reached from the returns.

The Editor has been guided by the criticisms and suggestions thus obtained, in compiling the successive issues of the American Rose Annual. Only the first issue, that for 1916, was made on his own ideas; all successive numbers have reflected closely the collective thought of the membership.

At first, too, this membership was neither widespread nor communicative. In 1916 but 54 amateur rose-growers related to the Society, with some 250 tradesmen, interested mostly in the cut-flower development of the rose. These excellent men had but a minor interest in outdoor roses, and the half-hundred amateurs were not sufficiently well distributed geographically to make their opinions, even when they could be obtained, broadly influential.

With this eighth issue of the Annual a totally different condition obtains. To be sure the tradesmen, not greatly increased in number, are yet "pen-tied," and the Editor finds it almost impossible to get from them much desired suggestions and information, despite the fact that no issue of the Annual has failed to report closely and accurately on the tendencies of commercial rose-growing, while also giving advance information as to the more important new forcing roses. The showing in this issue of Mr. Joseph H. Hill's well-named Sensation rose is continuing evidence, and the recurring reports and prophecies of such leaders as E. G. Hill, S. S. Pennock, Charles H. Totty, W. R. Pierson, and others make the Annual the true record of commercial rose progress.

But the amateurs, the outdoor rose-growers, those upon

whom the main dependence rests to make the rose universal in America, are now alert, and willing to give and get information. Moreover, there are thousands of them, and they are distributed in every state and province of the United States and Canada, as well as in twenty-six foreign lands. The membership of the American Rose Society is truly continent-wide, and it is thoroughly interested in and concerned about the rose.

In June, 1922, President Pyle had sent to the entire membership a query card asking for returns on the "favorite ten" bush roses—the Teas, Hybrid Teas, etc,—and on the best ten climbing roses. The response was by far the largest in number and most informative in character of any yet received. Some 426 rose-growers took the trouble to answer, and many of them wrote letters in addition to using the return card. These replies have been carefully collated and studied and the information they provide is here made available.

It is not too much to say that the conclusions reached are surprising, and even astonishing. That there should be such unanimity of opinion; that the favorite bush and climbing roses should be so nearly identical all over America—North, South, East, and West; that the verdict of this great and acute jury should be so definite, is matter for gratification.

Further, the showing is most important in its helpfulness. The beginner in rose-growing has available to him a safe guide to primary success. The dozen favorites among the bush roses—for it was easy to extend the ten to twelve from these complete returns—give anyone anywhere a blooming, scented, colorful, dependable assortment with which to lay the foundations, so to speak, of a rose-garden. The dozen hardy climbers provide a reach of vigor and beauty that was unattainable anywhere in the rose world at the beginning of the twentieth century.

That there was great opportunity for selection is shown by the fact that in all 287 bush roses and 118 climbers were named in the returns. It was not at all a limited choice these amateurs had, in selecting by majority their "best 40" out of a total of 405 varieties considered. Indeed it may be assumed that the choice covered every rose available commercially in America, for every one of the 405 sorts was among the "best 10" in some-

one's list, and there were certainly as many more not considered worth including. (The entire list voted upon can be had upon application to the Editor of the Annual.)

The lists provide not only safe guidance for the favorite dozen in each class, but as well almost as dependable choice beyond the favorites. All of the bush roses included in the "favorite dozen" in each of the five sections come within 22 varieties, and the amateur can well depend upon all of them.

With the exception of two sorts not hardy north, all of the 18 included climbers may well be planted by anyone who has room for their varied beauty.

A consultation of Plates III and IV, showing both the "favorite dozens" of bush roses and of climbers, will disclose the broad range of form and habit included in these selections.

The Editor confesses to some surprises, beyond the main surprise at the relative unanimity of choice. He rather expected Radiance to lead, but had no idea that Los Angeles would be in this chosen dozen. There was reason to believe that Frau Karl Druschki would be at the top, but it isn't.

Then in the climbers there was the thought that the Noisettes would take top place in the South and in California, but instead we see the same American trio, all Van Fleet originations, leading everywhere, and in the same order, save only in the South, where Silver Moon changes places with Dr. W. Van Fleet. This latter difference seems peculiarly proper, because of the Cherokee blood in Silver Moon.

The lists follow, first as collated for all America, next as including all the varieties in the two classes embraced in the favorite dozen for each of the five sections, and last in the choice as separated into those five geographical sections.

The Editor feels that these authoritative selections, the work not of one observer, however capable, but of over four hundred keen critics, taken in connection with the basis of further selection found in Capt. Thomas' article, on page 23, and considered also with "Beginning with Roses" on page 43, provide data of such definiteness as to remove doubt. The beginner may begin with confidence and be encouraged toward his own adventuring if he follows these clear indications of the dependable rose way.



PLATE IV. The "Favorite Dozen" Hardy Climbing Roses

1, American Pillar, HW.; 2, Climbing American Beauty, HW.; 3, Hiawatha, HW.; 4, Silver Moon, HW.; 5, Tausendschön, Mult.; 6, Paul's Scarlet Climber, HW.; 7, Gardenia, HW.; 8, Excelsa, HW.; 9, Christine Wright, HW.; 10, Aviateur Blériot, HW.; 11, Dorothy Perkins, HW.; 12, Dr. W. Van Fleet, HW. (See page 42.)

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FAVORITE BUSH (TEA, HYBRID TEA, AND HYBRID PERPETUAL) ROSES

THE FAVORED ROSES OF ALL AMERICA

41

IN THE NEW ENGLAND STATES (Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island):	IN THE MIDDLE STATES (New York, New Jersey, Pennsylvania, Delaware):	IN THE CENTRAL STATES (Ohio, Indiana, Kansas, Missouri, Michigan, Wisconsin, Minnesota, Nebraska, Iowa, South Dakota, Arkansas):	IN THE WESTERN STATES (Washington, Oregon, California, Colorado, Utah, Arizona, Wyoming, Idaho):	IN THE SOUTHERN STATES (Maryland, Dist. Columbia, Virginia, W. Virginia, S. Carolina, Georgia, Florida, Alabama, Texas, Kentucky, Tennessee):
Frau Karl Druschki Ophelia Radiance Duchess of Wellington Mrs. Aaron Ward Guss on Teplitz Los Angeles Kaiserin Aug. Victoria Killarney Mme. Edouard Herriot Jonkheer J. L. Mock Lady Alice Stanley	Ophelia Frau Karl Druschki Radiance Duchess of Wellington Mrs. Aaron Ward Los Angeles Mme. Edouard Herriot Columbia Guss on Teplitz Lady Alice Stanley Killarney Red Radiance	Frau Karl Druschki Ophelia Radiance Guss on Teplitz Jonkheer J. L. Mock Columbia Mme. Caroline Testout General Jacqueminot Los Angeles Sunburst Killarney Mrs. Aaron Ward	Ophelia Mme. Edouard Herriot Los Angeles General MacArthur Frau Karl Druschki Lady Hillington Mme. Melanie Soupert Hoosier Beauty Duchess of Wellington Mme. Caroline Testout Joseph Hill Sunburst	Radiance Frau Karl Druschki Ophelia Red Radiance Sunburst Guss on Teplitz Mrs. Aaron Ward Kaiserin Aug. Victoria Columbia Mme. Caroline Testout Lady Hillington Duchess of Wellington

FAVORITE CLIMBING ROSES

IN THE NEW ENGLAND STATES:	IN THE MIDDLE STATES:	IN THE CENTRAL STATES:	IN THE WESTERN STATES:	IN THE SOUTHERN STATES:
Dr. W. Van Fleet Silver Moon American Pillar Dorothy Perkins Tausendschön Paul's Scarlet Climber Cl. American Beauty Excelsa Hiawatha Aviateur Bleriot Christine Wright	Dr. W. Van Fleet Silver Moon American Pillar Paul's Scarlet Climber Dorothy Perkins Tausendschön Cl. American Beauty Gardenia Excelsa Christine Wright Hiawatha Cl. Lady Ashtown	Dr. W. Van Fleet Silver Moon American Pillar Cl. American Beauty Dorothy Perkins Excelsa Tausendschön Paul's Scarlet Climber Christine Wright Hiawatha Aviateur Bleriot Gardenia	Dr. W. Van Fleet Silver Moon Tausendschön American Pillar Cl. Mme. Car. Testout Cl. Cécile Brunner Dorothy Perkins Paul's Scarlet Climber Mme. Alfred Carrière Excelsa Cl. American Beauty Maréchal Niel	Silver Moon Dr. W. Van Fleet American Pillar Cl. American Beauty Dorothy Perkins Paul's Scarlet Climber Tausendschön Maréchal Niel Christine Wright Excelsa Gardenia Mrs. Robert Peary

The tabular list on the preceding page gives the selected roses for each section of the country. Taken all together, the two lists of chosen sorts for the whole country follow, together with the vote received by each in the total of 426 votes cast.

The "Favorite Dozen" Bush Roses in the United States:

Ophelia, 202	Duchess of Wellington, 103
Frau Karl Druschki, 183	Mme. Edouard Herriot, 82
Radiance, 163	Columbia, 74
Los Angeles, 114	Killarney, 74
Mrs. Aaron Ward, 108	Kaiserin Augusta Victoria, 75
Gruss an Teplitz, 107	Sunburst, 70

The "Favorite Dozen" Climbing Roses in the United States:

Dr. W. Van Fleet, 262	Tausendschön, 100
Silver Moon, 197	Excelsa, 68
American Pillar, 174	Gardenia, 50
Dorothy Perkins, 122	Christine Wright, 46
Paul's Scarlet Climber, 107	Hiawatha, 38
Climbing American Beauty, 106	Aviateur Bleriot, 23

See Plate III, facing page 24, and Plate IV, facing page 41, for accurate pictures of each of these selections.

As previously suggested, the beginner would not go astray if he planted all of the roses included in the five lists, as they follow.

All the Varieties Included in the "Favorite Dozen" Bush Roses in the Five Districts of the United States:

Columbia, HT.; Duchess of Wellington, HT.; Frau Karl Druschki, HP.; General Jacqueminot, HP.; General MacArthur, HT.; Gruss an Teplitz, HT.; Hoosier Beauty, HT.; Jonkheer J. L. Mock, HT.; Joseph Hill, HT.; Kaiserin Augusta Victoria, HT.; Killarney, HT.; Lady Alice Stanley, HT.; Lady Hillingdon, T.; Los Angeles, HT.; Mme. Caroline Testout, HT.; Mme. Edouard Herriot, Per.; Mme. Mélanie Soupert, HT.; Mrs. Aaron Ward, HT.; Ophelia, HT.; Radiance, HT.; Red Radiance, HT.; Sunburst, HT.

All the Varieties Included in the "Favorite Dozen" Climbing Roses in the Five Districts of the United States:

American Pillar, HW.; Aviateur Bleriot, HW.; Christine Wright, HW.; Cl. American Beauty, HW.; Cl. Cécile Brunner, Mult.; Cl. Lady Ashtown, Cl. HT.; Cl. Mme. Caroline Testout, Cl. HT.; Dorothy Perkins, HW.; Dr. W. Van Fleet, HW.; Excelsa, HW.; Gardenia, HW.; Hiawatha, HW.; Maréchal Niel, Nois.; Mme. Alfred Carrière, Nois.; Mrs. Robert Peary, Cl. HT.; Paul's Scarlet Climber, HW.; Silver Moon, HW.; Tausendschön, Mult.

The 22 favored bush roses include, in broad color classes, 2 white, 7 pink, 5 red, 5 yellow and 3 salmon sorts. The 18 favored climbers are divided between 2 white, 8 pink, 4 red and 4 yellow varieties.

Beginning with Roses

By THE EDITOR

THE rapid increase in membership of the American Rose Society, and the earnest desire shown by the acute rose-lovers who make up the major part of its membership to help those with less information, have led to the suggestion of the President and the Chairman of the Membership Committee that, departing from the usual plan of the American Rose Annual, there be printed this year primary directions and suggestions for succeeding with roses, later to be made separately available.

The paragraphs that follow are therefore addressed to the beginner. If the article were more extensive it might have been entitled "A Primer of Rose-Growing." It has been made possible by the close and critical study given by the Editor for many weeks to the details of rose relations during the writing of his own book, "The Rose in America."

It is intended that the directions to follow shall be quite general in their character, and that they shall cover only the preparation of soil, the obtaining and handling of plants in suitable varieties, their proper planting and culture during the first season. By the time the beginner has cared for roses for one growing season, he will—particularly if he has been conferring, as is his fine privilege within the American Rose Society, with others of like desires—be no longer a beginner with roses, but will have knowledge of his own and be ready to assimilate and use what he can find, in the American Rose Annual and in other publications, beyond the primary relationships.

Location and Soil. Roses demand an open, yet protected situation in so far as the bush sorts are concerned. It must be open in the sense that there is free air-circulation and access to sun at least 60 per cent of the time, and protected in the sense that it is not subject to the assaults of unchecked gales. If a rose-bed is to be located contiguous to some planting which forms a windbreak, it must not be close enough to be influenced by the roots of the trees or shrubs composing the

windbreak, for the Queen of Flowers will simply retire from the scene rather than compete with hungry tree roots.

To grow roses to success and pleasure, good soil must be provided. The rose is a strong feeder, and while plants can drag out an existence in poor soil, they will not provide in those conditions the growth and bloom that well-enriched soil encourages. This is emphasized because failures from planting in poor soil, poorly prepared, are inexcusable.

There is little present sympathy with the old idea of soil-preparation to 3 and 4 feet of depth, so extensive and difficult as to repel and prevent rose effort. Eighteen inches of thoroughly efficient preparation, above any part of the preparation necessary to secure good drainage, will give excellent results, but it should be noted that the word "thorough" is used. It means such digging and raking as will completely intermix the soil and the fertilizer. Rose roots do not travel far to hunt food; it must be close by.

Drainage is mentioned because roses will not endure wet feet. They need much water, but it must pass quickly through the soil, and if the location is in heavy soil with an almost waterproof subsoil, it is necessary to have at least an extra 6 inches of preparation, involving stones, sods, and rubble of any sort which will permit the water to drain away.

No material is better for enriching the soil than well-rotted animal manure. Cow-manure is desirable, but not essential, and ordinary stable manure, if it is thoroughly decomposed, is satisfactory. It should be used in considerable quantity, even up to one-third the total bulk of soil in the beds, and it must be, as before noted, thoroughly intermixed with the ground, though under no condition must unbroken clods of manure come in contact with rose roots.

Additional fertility is readily added in the way of ground bone, and where soils tend to be sour the sweetening effect of a little slaked lime or wood ashes is most desirable. The ground bone, or bone-meal is added at the rate of a good trowelful to each plant.

The location and soil are mentioned first because there ought to be full preparation before plants are obtained. A word concerning the methods of placing roses may be here in point.

They are better handled and watched and cared for in relatively narrow beds, not more than 3 to 4 feet in width, and if these are arranged so that they are framed in by any protective border, there is usually good garden design.

What Sort of Plants? There are those who insist that only own-root plants are proper to plant and there are those who are equally insistent upon the virtues of budded or grafted roses. Either form, in frankness, does well where it does well, and the beginner may well be guided by the amount of money he can spend. The mail-order, own-root roses are usually smaller and younger, and cost less, and they may be adventured with on that basis. The outdoor-grown, own-root, budded or grafted roses are much larger, ought by all means be planted in a dormant condition—not from pots—and usually give a quicker and more extended result. Elsewhere in this Annual will be found intimate details and comparisons which will help the beginner to consider this point. He may be assured, however, that whether he plants own-root or budded plants, getting a good quality of plants in either case, the result is mostly in accordance with the care and attention he provides.

What Varieties to Plant. The report given on page 38 in this Annual of the remarkable referendum conducted in 1922 among the members of the American Rose Society does give light on varieties. The report on the best dozen bush roses and the best dozen climbing roses, classified as it is, tells the beginner what he may rely on anywhere in the United States. Outside that list the world is his field, limited by his ground and his pocketbook, and it is not the place of this essay to advise him, save to urge that he does put in the dependable roses to keep him encouraged, both in bush and climber classes, independent of his experiments and the pursuing of his own tastes and desires.

A word should be said concerning early ordering. There can be no least doubt that the dormant rose begins action much earlier than is ordinarily supposed, and that the sooner it gets in the ground after the ground is workable in the spring the more likely it is to do well. There is every urgent reason, therefore, for early ordering and early receiving, even if the roses come before the ground is dry enough to handle, when they can be protected by "heeling in" in earth for a few days.

The smaller forms of own-root roses are usually shipped in a growing condition, and may and do come later. If they have been well ripened and are taken from a cool greenhouse or coldframe, there should be little check in transferring them to the ground at any time prior to the formation of buds.

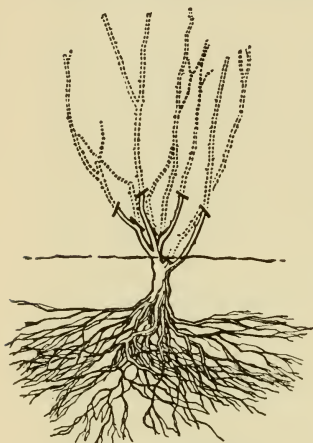
Receiving and Planting Roses. The field-grown outdoor plants, as has been stated, usually come dormant—that is, without leaves or growth—with their roots kept damp by moss.

They should be opened in a protected place, away from sun or wind, and without delay “heeled in” by digging a shallow trench in which they are safe while the final planting preparations are being made. If the packing material is in the least dry and there is any sign of shriveling in the tops, it is a good plan to bury the whole bundle in moist earth three days at least, covering roots and top alike with 6 inches of soil.

The own-root growing roses can be kept in shelter, but with their tops exposed to air and light, and always with enough moisture applied about the roots to keep them moist.

Preparation for planting of the field-grown roses is primarily pruning. A diagram is printed here to show an average field-grown plant as it comes, with the trimming indicated necessary to get it ready for planting. Any broken or mangled roots should also be trimmed clean, all this work being done in complete shelter and on the basis that every moment the root is out of the ground it is being damaged. If planting is to be done at once after the pruning, the pruned plants may be kept in a pail of water, from which they can be taken, one at a time, as actually put in the ground.

The own-root plants seldom need pruning, unless there is abnormally long growth. Any sort of transplanting is a check, and if there is this long growth it is well to cut them back somewhat.



Hybrid Tea Rose as properly
pruned and planted

The actual operation of planting is simple, but needs care. In the previously prepared ground an ample hole should be dug to receive the roots of the plant, spread out much as they were in the nursery. A little mound at the bottom of the hole on which the roots may be separated and spread is an advantage. It is an outrage to bunch the roots; don't do it! The plant should by all means be set at least 2 inches deeper than it was in the nursery, so that the bud or graft is completely covered. The soil-line on the pruning diagram will indicate this relation.

Now sift in around the roots the finer top-soil, gently shaking the plant up and down to settle it under and among the roots—there must be no air-spaces below. As the ground is added, make it firm, at first gently, and after the roots are completely covered, solidly, so that when the ground-level has been reached the plant is actually planted. Using the feet around the plant is a good practice, always thereafter stirring the surface so that it is fine and loose, for cultivation and aëration.

The distance apart to plant depends on the plants themselves. Teas and Hybrid Teas in outdoor-grown stock do well at 18 inches apart; Hybrid Perpetuals, Rugosas and bush roses take more space, even up to 3 and 4 feet. Hardy climbers must be planted according to their desired effect, and in a hedge ought not to be closer than 6 feet, to give room for the canes that are to come. The own-root roses are often planted as close together as 9 to 12 inches, because they are smaller and the effect will be better.

Let there be caution as to putting in any own-root rose which shows mildewed or diseased foliage. Don't do it! Put that plant in a little secluded, open-ground hospital somewhere, and dose it with dusting sulphur and lead-arsenate until it is well enough to associate with its brethren. Mildew and black-spot, the two rose troubles most prevalent in America, are contagious, and it is sinful to start wrong, with infected plants.

Summer Care. After the plants have begun growth, and all through the summer, there should be continual surface cultivation. If the season is dry, an occasional thorough watering—with emphasis on the word thorough—will be helpful. No weeds should ever appear, and there should be watchfulness as to any possible “suckers” from the stock on which field-

grown roses are budded. These suckers will appear separate from the main stem, and will usually have leaves of a different color, and showing a different number of leaflets. It is not hard to distinguish them. They should be cut off underground immediately on being noticed.

Insects and diseases can be protected against, first, by careful culture as above noted, and second by the use of several simple items of care. The rose-aphis, or "louse," can be removed quickly either by a forceful stream of water or by any of the tobacco preparations advertised in the Annual, or in any good catalogue.

A dusting of the foliage in the morning, when it is damp with dew, with a mixture of nine parts dusting sulphur and one part finely ground lead-arsenate, is an excellent preventive of both mildew and black-spot, and needs to be done at least every three weeks. If one part of tobacco dust is added, the aphids are also caught. It should be noted that mildew is *on* the leaf and occasionally can be removed, while black-spot is *in* the leaf and itself surely removes the leaf, forcing the plant to make new foliage, which is readily reinfected. (Full details concerning diseases and insects were printed in the 1922 Annual, and thus the story is only summarized here.)

Cutting Roses. By all means use the roses that bloom. If they are cut with reasonable discrimination and long stems, their removal tends to strengthen the plant and start it toward producing more buds. Be liberal with your roses and your roses will be liberal with you.

Winter Protection. Elsewhere in this number of the Annual much is said concerning climatic sections and winter protection. It is sufficient here to say that winter damage, save in the very coldest neighborhoods, is more from high winds, the hot sun, and successive freezing and thawing than from low temperature. Hilling up with earth for 6 to 12 inches and covering over that with any loose material that will keep off excessive water, seems to carry roses through in the most arduous climates. In much of the territory of the United States a lesser protection, like evergreen boughs, is ample.

Phosphoric Acid for Roses

By J. HORACE McFARLAND, Harrisburg, Pa.

ALL suggestions as to soil-preparation for roses rest on the use of much animal manure. Formerly, nothing could be considered but cow-manure—and even yet one of the largest producers of commercial cut-roses maintains a considerable herd of cattle, primarily to secure that scarce fertilizer—but now we hope for just plain manure. Indeed, it was soon discovered that horse-manure, well rotted, was as valuable as cow-manure. A high authority (Bailey) shows that “it is richer in nitrogen, and usually also in phosphoric acid and potash, than the manure of either cattle or hogs.”

But horse-manure is as hard to come at, for most of us, as is cow-manure, and it is also relatively costly. Therefore, we who want to have our roses flourish are forced to consider other means of soil fertilization. The farmer, who practices a carefully-planned rotation of crops, has at his command the obtaining both of fertility and humus (organic material)—the latter most important on the heavy soils that roses delight in—through “soiling,” or “green-manuring,” that is, the growing and plowing under of suitable plants, usually some form of clover or other nitrogen-fixing legume.

The rose-grower, however, cannot “rotate.” He plants his roses in prepared beds, and he expects them to grow and improve from year to year. He must add fertility through surface applications, and these have largely included rotted animal manure. Latterly it has appeared that these manures, especially if added in the Middle States regions for protection in early winter, to be dug in after winter had passed, afforded favorable conditions for carrying over the hated black-spot and powdery mildew organisms, so harmful in summer.

So we have used bone-dust and other commercial fertilizers, and have promoted summer growth by the application of dried and powdered sheep-manure, notwithstanding the relative incompleteness of these fertilizers, and their entire freedom from the much-needed humus so well supplied by animal manures.

Attention now has been called by Mr. J. H. Nicolas, an Indianapolis member of the American Rose Society, to the value in rose-growing of "basic slag," a remainder of iron- and steel-making, as a stimulating and rejuvenating application particularly adapted toward rose prosperity.

The claim is made that this basic slag, as "reprocessed" under a German patent now used in America, provides a material which includes 2.62 per cent of phosphoric acid, 36.48 calcium oxide (lime), 14.47 iron oxide, 9.62 manganese oxide, 8.02 magnesium oxide, 23.24 silicic acid, and other minor items.

In addition to its provision of the important phosphoric acid and the scarcely less important soil-sweetening lime, it is claimed that this reprocessed basic slag, through its content of other metallic oxides, stimulates the activities of the soil bacteria, which are known to be the most important agents in promoting growth. The action is said to be quite lasting, and while the use of the material is not offered as a substitute for animal manures, it is very agreeably suggested that less of the latter scarce material (Fords do not help us in this respect!) will be required if the reprocessed basic slag is used, possibly even to the extent of applying animal manure but once in three years, and therefore, in so far as it affords the best breeding-ground for mildew and black-spot, protecting to that extent.

Inasmuch as the claims for basic slag seemed rather large, a letter describing them was referred, through Dr. L. H. Bailey, to Dr. T. L. Lyon, Professor of Soil Technology in Cornell University. It is proper to call attention to the fact that Dr. Lyon's letter below refers only to the untreated material, to which the addition of lime seems to be advantageous in the production of more oxides, which are much more easily, as he says, "converted into carbonates in the soil and ultimately into silicates."

Dr. Lyon's letter follows:

I am returning enclosed the letter from Mr. Nicolas. Basic slag is a good source of phosphorus for fertilizing purposes. It is produced as a by-product in the open-hearth method of smelting iron ore of high phosphorus content. The excess phosphorus remains in the slag in the form of a readily available phosphate, together with considerable calcium hydroxide, which gives the material an alkaline reaction and causes it to have a neutralizing property in which it resembles lime. Its beneficial action in acid soils is due in part to this property.

The effect of this material on soil bacteria is similar to that of the addition

of acid phosphate and lime. The acid phosphate furnishes the soluble phosphorus necessary for a rapid development of certain beneficial bacteria and the lime reduces the acidity that is toxic to them. Both the nitrogen fixers and the nitrate formers are benefited by these conditions. He is, therefore, correct in claiming this property for basic slag, but it is not peculiar to this material alone.

He is also correct in asserting that basic slag contains manganese and magnesium. The latter has the same properties as the calcium and is present because a dolomitic limestone is used in the smelting process. Manganese possibly has a catalytic action in the metabolism of plants and in some soils has been found to stimulate growth when used in quantities of about fifty pounds to the acre.

Basic slag has been largely used in Great Britain, where the process was invented. It is highly esteemed as a carrier of phosphorus, especially for top-dressing pastures. I can see no objection to advertising the material if the claims made for it are commensurate with what may be expected of it.

Application at the rate of a handful to a rose plant is recommended. As the material is odorless and harmless to the hands and to the leaves of growing plants, and is further claimed to have a particular effect in stimulating the production of both flowers and fragrance in roses, its trial seems entirely in order.

As bearing on the claim just above mentioned, that of stimulating bloom, it is in order to quote from an article by Prof. P. A. Lehenbauer, of the Division of Floriculture in the University of Illinois, printed on page 103 of the 1922 Annual:

Phosphorus has an effect on the production of flowers. Experiments at the Illinois Experiment Station have shown that the use of phosphorus compounds in soils increases the number of blooms of roses when compared with the number produced on soil which did not receive a liberal application of phosphorus. Many of our soils are deficient in phosphorus . . . Further, phosphorus does not leach from the soil as does soluble nitrogen. The phosphorus fertilizers, therefore, may well be incorporated in the soil in quantities sufficient for a year's growth.

Very probably many members of the American Rose Society have at command a supply of material for not only adding humus but much fertility to the soil. For many years I have at Breeze Hill avoided the sad waste of burning leaves in the fall. My rough, heavy clay shale needs humus, and I found I could provide it by establishing a "muck-pile," to include leaves, weeds, vegetable refuse, and any vegetable matter not woody. Started in the fall and thoroughly wet several times in a season, with one turning over a year, gave me a supply of fine "black soil," or "leaf-mold," most valuable as fertilizer, soil-lightener, and mulch. I always feel now, when I see burning a pile of leaves, that more than money is being consumed.

The Members' Rose Forum

CONDUCTED BY THE EDITOR

INCREASINGLY and very pleasantly the members of the American Rose Society tell the Editor what they know and what they want to know. Their experiences make up this Annual, and are its only reason for existence.

Sometimes a question of great importance takes but a single sentence. There follows an attempt to state and to answer some of these questions for the general rose welfare. Names are not mentioned but locations are.

LEXINGTON, MASS. "Would like to know method of making new slips."

A "slip" is a cutting. Cuttings are of soft wood, meaning that in active young growth, or of hard wood, meaning that which is matured. The former are best obtained just under a rose bloom which has matured. If a bit of this wood containing one, two, or three "eyes" is cut off cleanly, the leaves removed, and thrust either into sand or light soil and sand, with but the top bud left out, in a situation in which the ground or sand is slightly warmer than the air, and if it is protected from too much sun and kept moist, it may emit roots and leaves. Hardwood cuttings made much the same way can be planted in a coldframe outdoors over winter, or buried in bundles in the soil until spring, when, if set out early in similarly protected ground, they are likely to root during the season. The essential thing in rooting is relatively even temperature and moisture, and to have the ground warmer than the air.

ROCHESTER, N. Y. "Please let us have a uniform schedule for judging roses at the Rose Society shows."

The 1920 Members' Handbook of the American Rose Society published "Suggestions for Summer Rose Shows," with a set of schedules. The Society contemplates a service manual for members which will again reprint these schedules.

ELMIRA, N. Y. "Plants going back to non-blooming plants of different foliage."

Wake up, brother, or the "suckers" will get you! Where

have you been? These shoots of different foliage are not what you thought you planted, but the stock on which those varieties were budded. Cut them off, and if there is anything left of the variety you planted, take care of it. Any shoots arising from the ground, not from the stem, are suspicious and should be removed at once.

HAVERFORD, PA. "Are roses grown in New York or New England more vigorous and robust near Philadelphia than those grown in Oregon? I have a number from the latter place."

Not to be at all disrespectful, this good lady might have answered her own question, because she has the roses to compare. Generally speaking, roses raised in the East ought to do best in the East, but there is no reason whatever why roses on hardy stocks from anywhere will not do well anywhere. The Editor has had at one time roses from California, Florida, and New Jersey, and each was happy and vigorous according to its variety, all being fresh and uninjured when planted.

DUBUQUE, IOWA. "How can an amateur tell safely without disturbing the roots of roses whether a shoot is wild? A greater number of leaflets is not always a sign."

To this inquiry the Editor has to reply that there need be no worry about disturbing the roots, but there ought to be much hurry about disturbing the wild shoot, or the shoot from the stock, which never looks like a Hybrid Tea or Tea. The leaves differ in color and they do not show flower-buds. Anyway, how does a mother tell twins apart?

ROCHESTER, N. Y. "I suggest sending a set of Rose Annuals to public schools in prominent cities for use in science classes."

This is a lovely compliment, but where will we get the Annuals? Even though the officers and the Editor all work for nothing, it is hard to "keep house" in the American Rose Society, and there are no funds to pay for surplus Annuals. Moreover, the earlier issues are out of print, and all will soon be. The wise thing is for our friend as a member to purchase extra copies while he can and put them in the science classes, where they would certainly do much good. They ought also be in the city libraries.

BROOKLYN, N. Y. "I find budded stock much more satisfactory than own-root. Bushes which I received from Los Angeles have not done well here in Flatbush."

There are others! It may be that the western roses were budded on Ragged Robin, which is a fine stock for the West but seems not to be always reliably permanent in the East.

SAUGERTIES, N. Y. "*Rosa Hugonis* has done very well planted among shrubbery."

This gives the Editor joy, because he has done and preached the same thing and has been much pleased with the result. *Hugonis* is a very lovely shrub, as well as a great rose. It ought to take the place in America of one million *Spiraea Vanhouttei* and ten millions of *Hydrangea paniculata grandiflora*! (The figures may not be wholly accurate!)

PHILADELPHIA, PA. "Would like to know where and when to buy safely."

The "where" can be determined by looking in the advertising pages of the American Rose Annual. The Editor believes in buying early enough to plant in the fall if you can be ready, and if not to buy in the winter so as to have the roses at the earliest possible moment in the spring. Roses get busy long before humans do, and the earlier they are permitted to be busy where they ought to be, the better for the blooms to come.

MAGNOLIA, N. Y. "My soil is very sandy and roses did poorly during hot weather. What shall I mix with this soil?"

HAVERFORD, PA. "Clay soil around the roots and a topping of 4 inches of light soil seems to produce good results."

Here Haverford answers Magnolia and tells exactly what to do. The Editor can do no better.

ANNAPOLIS, MD. "Why do Hybrid Tea roses begin to dwindle when about four years old? They are well fed."

Perhaps they are too well fed! Of course they ought not to dwindle. By all means take them up this spring and replant them in fresh soil. The Editor has seen some poor, miserable wrecks become good roses in one season by transplanting, in his garden, to the "hospital," which is simply ordinary garden ground.

FRANKFORT, KY. "Los Angeles and Louise Catherine Breslau won't grow for me. Any suggestions?"

Certainly; stop trying to grow them! Elsewhere in this number Mr. Wood, of Danville, describes the late spring frosts of Kentucky, which seem to be very unfavorable to the Pernet-

iana roses, and until Pernetiana varieties come through that are of more enduring quality, it is better to omit them in such places. You may note in Mr. Courtney Page's descriptions of the new English roses that one is specially mentioned as almost free from Pernetiana blood, while yet being yellow.

KINSTON, N. C. "Own-root roses grow and bloom better for me in eastern North Carolina."

NORTH HAMILTON, CANADA. "I find that own-root plants are best for my soil. A light sandy loam suits my plants best."

Three cheers! This is real experimenting, and such conclusions ought to be of value because of the direct local application they present. See Mr. Gersdorff's careful showing in this Annual.

HIGHLAND PARK, ILL. "Howard Smith's new rose, named 'Mrs. W. C. Egan' by the Garden Club of Illinois, gave an average of 40 blooms per plant this hot, dry summer. It was planted in the spring."

This, we will say, is a good result both for our friend Egan, for his good wife, and for the California rose. Evidently the new rose is worth while.

PHILADELPHIA, PA. "Radiance and Red Radiance are vigorous growers and unrivaled as producers."

MEXICO CITY, MEX. "Radiance does wonderfully well here, blooming continuously from February 25 to October 30 on 5-foot shoots."

Radiance, please note, is a purely American rose, and if Red Radiance and Radiance are combined it will be seen, on referring to the referendum reports elsewhere presented, that it is the most popular rose in the United States. We need many more American-bred roses as good as Radiance.

SARATOGA, CALIF. "The Gloire des Rosomanes, which we all love for its color, fragrance, everblooming qualities and hardiness as well as its freedom from mildew, makes wonderful hedges as well as a quick grower for trellises. May I recommend an old favorite, 'A Book about Roses,' by S. Reynolds Hole, the English dean of Rochester?"

Most assuredly it is well worth while to recommend Dean Hole's delightful book, which is not only good rose-growing but exceedingly good literature.

The Gloire des Rosomanes is also known as "Ragged Robin," the stock on which some of the fine Howard & Smith roses are budded. It is all that is claimed for it in California, but seems rather uncertain in the East as to hardiness and persistence.

It is a curious old variety of undetermined parentage, and itself was one of the parents used in producing the well-known General Jacqueminot by Roussel, in 1853.

LACONIA, N. J. "May I have a few definite suggestions as to additions of new roses to small collections?"

Yes, indeed; the Referendum Report, on page 38 of this Annual, tells the dozen bush roses and the dozen climbing roses that no one should be without, and the lists that follow indicating the roses voted upon are interesting. The first extensions in the new roses would be the five that make up the whole twenty-three included in the five best dozens as selected for all parts of the country. After all, the best additions to this basic twelve are those one makes from experience.

NAPOLEON, MO. "I would like to have the *modus operandi* of budding or grafting the *Rosa multiflora japonica*."

The precise detail for this operation was published on page 47 of the 1917 Annual, in an article by Dr. Robert Huey. It has been reprinted in the Editor's new book, "The Rose in America," which an unreasonable modesty prevents the discussion of right here. In brief, the budding operation for roses is just the same as for peaches, apples, or any other subject. The "stock" must be in free-growing condition, so that the bark will easily open to a cross slit, the shape of a cross, cut with a sharp knife, into which is slipped a "bud" of the desired variety, cut closely from a vigorous shoot, the two being bound together until union occurs.

CORTLAND, N. Y. "My rose troubles are black-spot, caused by a druggist's apprentice's mistakes in mixing spray. The high altitude here gives us very cold nights, and it is considered impossible to raise roses of hybrid sorts."

Here is an alibi for the druggist's apprentice: he never did produce black-spot, which comes from an atmospheric infection and is carried by spores, as may be seen in the 1922 Annual. Don't use spray this year, but dust your plants with nine parts dusting sulphur and one part powdered lead arsenate. Do this *before* you see the black-spot, and you ought to be happy.

On the altitude and adaptability trouble, read with great care Capt. Thomas' article on page 23, this Annual.

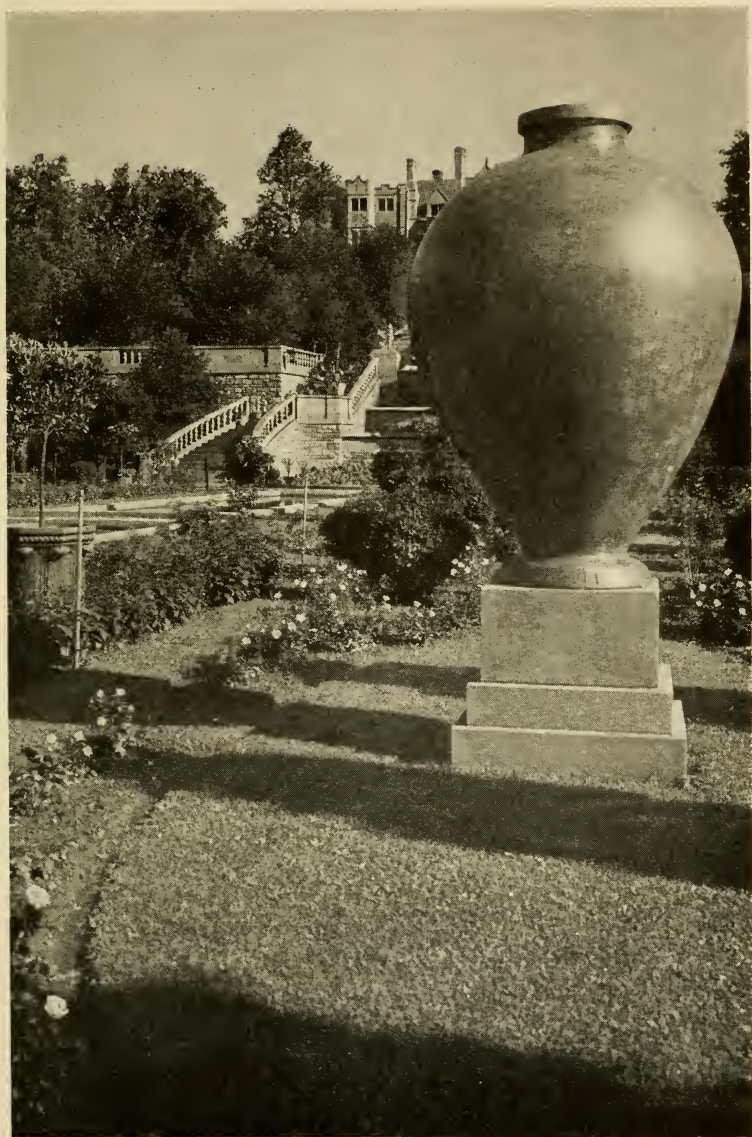


PLATE V. In the Rose-Garden of Charles M. Schwab, at Loretto, Pa.
(See page 57)

Mr. Schwab's Rose-Gardens at Loretto

By CHARLES WELLFORD LEAVITT, New York City

EDITOR'S NOTE.—Right on a summit of the Pennsylvania Alleghanies, nearly a half-mile in elevation above sea-level, a great estate has been created for Mr. Charles M. Schwab, the man of steel who is also very much a man among men. Mr. Leavitt, the distinguished landscape architect who has worked out this notable garden in all its parts, here tells of it, and also provides us with a photograph to show the place and effect of the roses in the general scheme. (See Plate V, facing this page.) No part of the story is pleasanter to read than that which tells of the pleasure Mr. Schwab takes in his roses and his gardens.

It should be noted that the varieties Mr. Leavitt has found to endure this Middle States mountain climate are named, and thus serve as a guide for similar locations.

THE estate of Mr. Charles M. Schwab, at Loretto, Pa., consists of some seven hundred acres, and includes, besides the great garden, a wide stretch of farm land with its farm group, great woods and pasture, the residence and terraces, water features, an immense vegetable- and fruit-garden, greenhouses, a small open-air theatre, lodges, a little rustic cottage for the sole use of the owner, and the carefully designed golf-links.

The residence site is on the crest of a hill overlooking the Alleghany Mountains, and it is with the view to the south that we are interested at this time. From the residence on the southern side, a wide terrace leads to steps, close to the retaining wall, down to the swimming-pool heading the cascade, whose laughing water tumbles a distance of over 200 feet to the lily-pools in the great garden, forming an effective part of the great water feature terminated by the fish-fountain and the caryatids.


This great garden is 190 feet wide by 600 feet long. The three lily-pools across the center are each 12 feet wide. The rose-gardens are at either side of the lily-pools, and are framed by tall red cedars, relieved by the round contours of boxwood, and by the happy placement of Paul Manship's huge Etain jars, with inviting garden seats and other delightful garden accessories.

The beds in the rose-gardens are on the main axis of the great garden, in direct line of vision from the residence, forming

a very considerable part of the frame for the vista of the mountains beyond. They are of simple symmetry, these rose-beds, and owe their charm to their flowering and the wonderful light and shade of the surrounding planting, rather than to any intricate design of bed formation. Each bed was planted with one single variety of rose, and the mass of bloom is a joyous riot of color.

Loretto, although not itself a mountain town, has all the effect of mountain climate, because of its high elevation, full 2,000 feet above sea-level. The flowering season is short and intense; the winter season, early, late, equally intense and unbelievably long! In order to determine which varieties of roses could stand the climate, a test-garden was laid out the year before the actual planting of the rose-gardens in the great garden. The results were most helpful. In general, the bushy Hybrid Tea roses passed the test splendidly, and Mr. Schwab rejoices in his beds of Killarney, Duchess of Wellington, Jonkheer J. L. Mock, Kaiserin Augusta Victoria, and Mrs. Aaron Ward, all used in regular color scheme. He also has beds of Hybrid Perpetuals, such as Frau Karl Druschki, George Dickson, and Mrs. John Laing. It has been found possible to use, at intervals, some standard roses—Gruss an Teplitz and Frau Karl Druschki. The climbing roses on the gate-posts have done well—Dr. W. Van Fleet, Gardenia, Evergreen Gem, and the like.

It is a happy rose-garden, a garden of true American atmosphere, with cheer and settled well-being; the garden of a man who enjoys his country estates and who uses them, not the formal paved garden of the absentee owner. His roses, his lilies, his iris, his tall cedars, his flowering shrubs, his pebble pathways, his farm buildings, his sculpture produced in the America of today, all give Mr. Schwab a unique estate to be enjoyed and to be used as a place for living.

 Many items of interest and importance are found in the department of "Rose Notes," beginning on page 176. These Notes are the gatherings from a large rose correspondence.

Roses Near Smoky Pittsburgh

By W. G. IRWIN, Pitcairn, Pa.

EDITOR'S NOTE.—Does it not seem outrageous, rather than pathetic, that humans should be expected to live and thrive in an atmosphere that kills roses and trees? Is not the remedy less to find resistant varieties than to breed resistance to these nuisances, surely as inimical to human health as to plant welfare? Virtually all of the atmospheric pollution Mr. Irwin complains of is preventable, just as water pollution is preventable.

The troubles with mislabeled plants are entirely avoidable, too, as are troubles through purchasing of itinerant salesmen. The rose firms advertising in the Annual are generally dependable, and the Editor will undertake to see righted any errors clearly traceable to the neglect or carelessness of any of them.

IN compliance with the suggestion of the Secretary, the writer will endeavor to give the result of a somewhat limited experience in rose culture in the Pittsburgh district where the atmosphere is laden with smoke from coke-ovens, iron and steel furnaces, and other industries, which greatly affect all plant-life.

These difficult conditions were recognized years ago with regard to shade trees, and as a result the ailanthus and sycamore are in wide use, because they endure where others fail.

The chemicals in the air are also death to many roses, especially the Hybrid Teas, which are out of the question here, and those who have not given up are keeping to hardy climbers, Hybrid Perpetuals, Rugosas, and hardy Baby Ramblers. But even many of these will not prosper, and the puzzling thing is that where one grower succeeds with one variety others fail, possibly due to different location and greater or less chemical content of the atmosphere.

A number of years of personal effort with Hybrid Teas failed to bring continuing results. One-year-old varieties usually grew well the first year, passed through the winter, started well the following spring, gradually disappearing during May or June without sign of injury from insect or disease. Two-year-old stock, both budded and own-root, acted much the same way, some few passing through the second year and second winter and then dying in June. The gas-laden atmosphere seems to be the explanation.

As to the roses which will thrive in this district, the writer's experience has been that with about thirty climbers, American

Pillar, Dorothy Perkins (both pink and white), Veilchenblau, and Hiawatha have excelled. In fact, the others followed much the course of the Hybrid Teas. The two first named, in spite of careful spraying and care, have developed some dwarfed branches, but after four years have bloomed quite well and seem established. They have also been subject to pests, but the winters have not bothered them. Many tender shoots wilt during the summer and die, from a foot down to a few inches from the tips of shoots. Again, the gas-laden air!

Hiawatha seems much better and grew faster, but developed some of the tendencies noted in the above. Veilchenblau, obtained from a northern New York grower, has been the best of all, the plant in question being about half double, with bloom that lasts a long time. It has large, bright green leaves, free from insects, with no fading until in September. It seems different from others of the same name obtained from other growers. Plants of other sorts, obtained from different growers, have shown marked differences in growth, foliage, etc.

If the American Rose Society could so supervise growers as to assure one that all roses offered for sale are true to name, a big drawback to general amateur rose-growing would be eliminated. The unknowing are too much led by catalogue pictures and descriptions, and by the untruthful canvasser. Sometimes the deliveries of plants sold by agents are outrageously delayed.

Of the Hybrid Perpetuals, efforts have been confined to Frau Karl Druschki, Paul Neyron, and one or two others, all of which are doing very well. The same is true of the Rugosa hybrids, Sir Thomas Lipton and Hansa, and also of Hugonis. These, of course, are hardier than even the hardy climbers, and the fact that they also do better indicates that it is a waste of effort to try to use the Hybrid Teas in this section.

In addition to the roses above noted, a number of the newer ones have been growing well for from one to three years.

So far as permanent results are concerned, catalogues should name the Hybrid Teas "never-blooming" and the Society should advise against them in this section if it wants to promote the idea of "A Rose for Every Home." It is true that the hardy Baby Ramblers or Polyanthas live up to their reputation for bloom and thrive all through the summer.

The great injury done by too glowing praises for the ever-bloomers, is that the beginners are led to expect great results, and when they fail, for the reasons before mentioned or from neglecting other things necessary, they conclude that rose-growing is beyond their sphere and give up without further attempts with the more hardy roses. It would be better sense and better business if the catalogues and agents started beginners with the varieties that honest investigation had taught them would succeed in these difficult conditions.

As to planting: the writer has found that the use of bones at the bottom of the trench, instead of stones, answers both for drainage and fertilizer, the latter being evident for half a dozen years or more. Research work to develop methods of combating chemicals in atmosphere and concerning impurities in water should be of interest about all industrial centers. Standardized, guaranteed, honestly described nursery varieties should materially reduce failures.

A Back-Yard Rose-Garden in Kentucky

By W. C. WOOD, Danville, Ky.

EDITOR'S NOTE.—In the endeavor to provide for members of the American Rose Society constructive help for every section of America, Kentucky has heretofore not been included. Mr. Wood, a busy lawyer, has now contributed from his direct experience.

THE climate of central Kentucky is probably as ill adapted to the culture of the Hybrid Tea rose as any section of the United States, unless it be the bleakest part of the North or the hot and arid Southwest. Situated as it is on the borderline between North and South, this locality has a variation of temperature that is not conducive to the best growth of the rose, which does not enjoy sudden and frequent changes. As a general rule, by the end of February or middle of March, the warm southern sun and winds have lured the plants into premature growth, and this early growth is almost invariably injured by late frosts and freezes, which sometimes occur as late as May 1. The result of this very discouraging condition is that there has been little progress in rose-growing in

this part of the country, and little attempt made to grow any roses but the climbers and the old-fashioned bush roses. After their period of bloom is over, in June, the neglected rose-gardens offer little attraction for the remainder of the year, and black-spot and mildew run riot.

This condition is changing slowly as the better modern roses gradually become known, but for the most part, even yet, in the greater number of gardens in this section of Kentucky, where bush roses are found at all, the most widely grown varieties are such old-timers as *Souvenir de la Malmaison*, *Hermosa*, *Old Blush*, and occasionally *La France* and *General Jacqueminot*. This backward condition is not so marked in the case of the climbers. Here we are more up-to-date, as these roses do not suffer so much from the vagaries of climate.

This lack of interest in the progress of the modern rose is, I believe, due first and mainly to the destructive late spring frosts I have referred to, and, secondly, to the class of cheap, own-root, hothouse-grown plants with which this part of the country has been flooded. One or two attempts to get a rose-garden started by setting out these highly touted, delicate little plants, often scarcely more than rooted slips, is enough to discourage the most enthusiastic rose-lover.

This is a report of the results of the efforts of an unskilled back-yard gardener to grow some of the later varieties of roses, mostly Hybrid Teas, under the adverse conditions that exist here. It is given at the request of the Editor, not that it offers anything new, but in the hope that it may prove of interest to others who are growing roses under similar conditions.

The table below gives the record of bloom of the varieties that have done best for me. For the purpose of comparison, I give in the second column the number of blooms these same varieties gave Capt. George C. Thomas, Jr., and in the third column the number reported by Mr. A. P. Greeley, of Washington, D. C., who is, I understand, a back-yard gardener like myself. Taking Capt. Thomas' record as a standard of comparison, this table will show results produced by these varieties under varying climatic conditions; but my figures represent the best that any plant of a variety has produced for me in a three-year test, as against Mr. Thomas' average bloom for a

variety tested. Mr. Greeley's best bloomers do not show in the table, for the reason that they are mostly roses that I have not tried. However, on many varieties, such for instance as Lady Ursula, Frau Karl Druschki, and Radiance, notably strong growers, his record is much better than mine. My roses are all two-year-old plants when set out, mostly budded on Multiflora.

VARIETY	NUMBER OF BLOOMS		
	Wood	Thomas	Greeley
Mrs. Arthur Robert Waddell	81	57	26
Lady Hillingdon (Briar)	65	36	
Red Radiance	51		
Lady Pirrie	39	56	36
Jacques Porcher	37	69	32
Mme. Leon Pain	36	41	
Mrs. Aaron Ward	33	38	42
Ophelia	32	45	40
Lady Alice Stanley	31	33	
Grange Colombe	31	55	
Mme. Segond Weber	29	49	27
Senateur Mascuraud	28	37	
Radiance	27	51	32
Chateau de Clos Vougeot	26	22	14
Mme. Edouard Herriott	23	32	14
Joseph Hill	20	21	25
Willowmere	15	18	11
Louise Catherine Breslau	13	12	10

Of these, which are all good, the most beautiful to me are Willowmere, Ophelia, Lady Alice Stanley, Chateau de Clos Vougeot, Grange Colombe, and Lady Hillingdon.

As a list of ten for the beginner to try I would suggest Radiance, Red Radiance, Lady Alice Stanley, Ophelia, Mrs. Aaron Ward, Lady Pirrie, Lady Hillingdon, Mrs. Arthur Robert Waddell, Jacques Porcher, and Grange Colombe. Both Radiance and Red Radiance are good all-round roses; I like Red Radiance better. Ophelia is the most beautiful of all the light-colored roses, and has fine fragrance; but Jacques Porcher and Grange Colombe are both good roses, though I have not gotten the growth and bloom from the latter reported elsewhere. Mrs. Arthur Robert Waddell is a wonderful grower; the color is most attractive, and while somewhat loose as to shape, its many fine qualities entitle it to very high rank as a garden rose. Lady Hillingdon is the most constant bloomer in my garden, seems as hardy as any Hybrid Tea, and both it and Mrs. Waddell seem to have the ability to "come back" after

being injured that is so desirable in this climate. Lady Alice Stanley is a wonderful cut-flower; all its blooms are of good quality, and it is close to the top among the pinks. Lady Pirrie is a fine grower and bloomer and its color in the bud is exquisite, but as evanescent as a sunset-tinted cloud.

Of the newer roses, the most promising I have tried are Miss Lolita Armour (of much the same color as Louise Catherine Breslau, though not as clear); Golden Ophelia, very fine; Rose Marie; and Hoosier Beauty, the most beautiful red rose I have ever seen.

Of the failures, Los Angeles has been the most complete with me. I have set out three strong budded plants of this widely heralded variety, all in the fall, and have never got a bloom; I am going to try one more, put out in the spring this time. Several of my friends have also tried this rose without success. Mme. Caroline Testout is another failure with me; this rose, so highly regarded elsewhere, simply will not grow. It does not like our climate, or soil, or something! Jonkheer J. L. Mock grew well the first year, then started too early the next spring and was so badly injured it never recovered; besides, its color blues, and the buds ball. It does not compare with Radiance or Lady Alice Stanley. Columbia did well for a year, and then had the same fate as Jonkheer J. L. Mock. Neither seems to have any "come back" when once injured.

Other roses which I have tried and discarded are Betty and General MacArthur which, though both good growers and bloomers, produce thin blossoms; Elli Hartmann, blooms of poor color and shape; Kaiserin Augusta Victoria, Natalie Böttner, and Mrs. Franklin Dennison, all very lovely but of poor growth.

I have not tried many Hybrid Perpetuals. My space is very limited, and I want plants that produce more constant bloom. However, J. B. Clark is a wonderful pillar rose, growing twelve to fifteen feet and producing hundreds of handsome flowers. Its color is much better in partial shade. Frau Karl Druschki I am about ready to give up; I cannot get the results from it reported elsewhere, and it has no fall bloom at all. George Arends is a good rose—one of the most beautiful of all pinks.

Of the Pernetianas, Mme. Edouard Herriot is the best

bloomer, but most of its blooms after the early spring are too thin. At its best it can hardly be equaled. Willowmere, the only one I would recommend for a small garden, while not as good a bloomer as it might be, is a good grower, very hardy, and of the most lovely shade of pink. My ideal would be a Willowmere that bloomed like Gruss an Teplitz!

As to the climbers, I need make no particular comment. Most all of them, except the tenderest, do well. Christine Wright, Dr. W. Van Fleet, and Climbing Kaiserin Augusta Victoria are particularly fine. I had a very beautiful Climbing Mme. Mélanie Soupert, which I nursed for two seasons, only to have it frozen April 29, 1921, after the new growth was well developed. It died back foot by foot; I threw it away in the fall.

A point that needs emphasizing is that the suitability of different varieties of roses for different environments varies more than is generally recognized. Of course, there are varieties of such outstanding merit that they will do well almost anywhere, but even these have their favorite situations. The most important thing is to find out what varieties suit your particular climate and soil. Because a rose does well elsewhere does not mean it will do just as well for you. It may do better, or worse! If it is only a partial success in other places, and you admire it, give it a trial; it may like your garden, and flourish. Even moving a rose to a different spot in the same garden may make a success out of a failure. As an illustration of how different roses fare in different localities, consider these comparative figures reported in the *Annals*: The National Rose-Test Garden at Washington reports Frau Karl Druschki as giving 222 blooms per plant. Mr. George R. Mann, of Little Rock, Ark., with all his wonderful record of bloom, gets only 18 from this same rose. The same Test-Garden reports 25 blooms from J. B. Clark, which is the most rampant grower I have, giving hundreds of blooms. Lady Hillingdon gave 21 blooms at Washington, 44 at Little Rock, and I got 65 here. Then Mr. Mann, most fortunate of men, gets 49 blooms from his Willowmere; mine, a strong plant, yields only 15. It will be a fine thing when the interchange of data among members of the American Rose Society enables the Society to publish a

list of best varieties for each locality,* together with the best stock on which to grow them. In the meantime, get all the good advice you can, and then experiment for yourself!

I have read all the articles in the *Annuals* and elsewhere on rose-growing, and have absorbed Capt. Thomas' book, to which I personally owe the pleasure and whatever success I have had out of rose-growing. But, after all, my chief problem remains unsolved, and that is how to bring my roses through April uninjured. It is easy enough to hill them up in the winter, and they will be snug and full of life in the early spring. Indeed, only one winter in my experience, that of 1917-18, was severe enough to do any material damage. But, oh, what to do for the plants in the late spring, after they have been growing a month or more, when some April day, after an unseasonably warm period, the rain ceases, the wind begins blowing from the north, the temperature steadily falls, and you look at your beautiful growing rose bushes and know that the time of danger has come! You hope it will not get cold enough to hurt, but it does; it drops to 25° or 28° above zero, and the tender, juicy young shoots are frozen.

Then, next morning, the sun is up early, the mercury in the thermometer mounts buoyantly, the winter is past, the rain is over and gone, and it is time for the flowers to appear on the earth; but Winter's Parthian shot has taken effect, and the damage is done. Well, you have long months ahead for the plants to recuperate and start to growing again, and most of them do, and come out fairly well; but if one could only avoid getting them crippled every spring. It is useless to say, "Hold the roses back." You can't do it. You can cut back to the lower buds, and in a measure obviate the damage early frosts have done, and I have sometimes cut back this way three and four times in a spring, and then had good plants. But I am speaking now of the freezes that come late, after the roses have been growing for weeks and the buds are even showing color.

I say every year, "Well, they will have to take their chances. If they are not hardy enough for our climate, let them get killed. I will raise something else." Then I hunt up all the


*Mr. Wood will have to admit that we are on our way at least, in the two important showings in this *Annual*, provided in the Referendum Report and in Capt. Thomas' recommendations.—EDITOR.

boxes, kegs, bags, and everything else on the place, and cover them up. The ideal way, if trouble and expense did not count, would be to have movable frames with canvas tops, and keep these ready to be put over the plants when an emergency comes. You may not need them more than once or twice in a season—usually more often—but when you do it will be like the proverbial need of a gun in Texas.

In central Kentucky we have the best of soil, which really needs little preparation. Though I have dug out my beds as Capt. Thomas advises, it is really not necessary to do this to get good results. Our roses need little winter protection beyond hilling up, and they are better off with too little covering rather than too much. I have found fall planting best; it is all right in the spring, if done early, but even then the plants do not get started as well. If you delay too long with dormant plants there comes a day when you might almost as well throw them away. I have put out a few potted plants, but never when I can avoid it. Either they are too little, or the roots are all doubled up in an unnatural way.

On the disputed question of budded *versus* own-root plants, my experience has been too limited for me to attempt to speak with authority, but all my successes have been with budded plants, and nearly all my failures with own-root plants. Above all, beware of the lure of cheap plants, especially those grown in a hothouse. They are too weak to make much growth the first summer while they are getting acclimated; they have not enough vitality to stand the first winter outdoors; and the next spring when you look for them, they are gone.

If you will get strong, healthy plants to start with, and love them enough to take care of them, they will, in spite of all difficulties, abundantly repay you with bloom.

 *The reader is referred to the article on page 19, with its inquiry looking toward support of the origination of new roses in America, and suited for America.*

The "Rose City of the East?"

By WALTER E. CLARK, Charleston, W. Va.

EDITOR'S NOTE.—Here is a story of an ambition and an endeavor which ought to be most encouraging to any other community in which a rose consciousness can be aroused. The result in 1922 of interesting nearly 3,000 homeowners in definitely agreeing to plant roses is in itself a success. It is hoped those who emulate will note the very definite and thorough methods used.

I AM writing of a city where dreams have been dreamed of making another Portland. We do not really believe that the dreams will come true—that is, not fully true—but we like to dream that they will; so we keep on. And it is not all fancy, either, even though we know that nature has blessed the Oregonian principality of roses with a special kind of climate, containing some more or less mysterious fostering element that man, with all his scientific resources, is powerless to provide.

But in this city of Charleston, W. Va., we have a climate favorable, if not superlative, for our purpose. This fact has long been recognized, and "Kanawha Roses" were long ago celebrated; if not widely renowned, at least regionally so. So our people believe—more and more of them every year, as the rose gospel spreads—that a real "rose city" may be built here: they believe that while the climate is only somewhat above average for the purpose in hand, the public's *will* to make rose-culture successful and general throughout the community can be strengthened until it becomes a superlative effort, a 100 per cent coöperative movement of the community. In short, we are resolved to make Charleston the "Rose City of the East."

The natural setting for rose-gardens and for general landscape decoration is excellent. Charleston is the capital city of the state. It is situated in a valley, at the confluence of two fine rivers, with the high, wooded foothills of the Appalachian chain on nearly all sides. It enjoys one distinction, in common with, perhaps, only two or three other cities in the whole country, including Harrisburg, Pa., of showing one of its best sides to the stranger who is passing by on the main line of railroad. The beautiful north bank of the Kanawha, with its

attractive residences all built on the north side of the street, and none on the street's south (or river) side, presents a beautiful green terrace (which is rapidly being "landscaped") to the thousands who travel through this valley on trains. In and around the city we have decidedly broken areas of ground, with comparatively few level spots, except in the municipal center. It is obvious that such a situation lends itself most cordially to the art of the skilful gardener.

The inception of the idea of making Charleston a real "rose city" came seven years ago. The rose-city plan first became a movement through the efforts of a newspaper, the *Daily Mail*. Since I happen to be the owner and editor of that newspaper, I would like to appear not to be exploiting the journal for its own benefit in this connection, for we have never done so; but it is necessary to tell how the rose project has been carried on. The newspaper started it, and through almost constant publicity and editorial advice in large doses, it has done much to exploit it.

In 1915 the newspaper began the publication of short articles on roses. At the same time it tried to stimulate interest in home vegetable gardening. It printed, without names of the owners, but with locality specifically indicated, brief daily descriptions of vegetable-gardens, under the uniform heading, "Whose Garden Is This?" They aroused much interest.

Early the following year, we printed in the newspaper, as a sort of "coupon," the "Pledge for a Rose City." It read as follows:

As my contribution to the plan of making Charleston the "Rose City of the East," I agree to plant or cause to be planted on my premises at least . . . rose plant(s) on or before April 25, 1916.

There was a space at the bottom for the signature, and a word of admonition on the lower margin: "Plant at least ONE." Readers were asked to sign the pledge and send it in. Of course, the names of pledgers were published day by day. Results the first year were measured by some 500 pledges to plant a total of between 4,000 and 5,000 rose bushes.

The campaign for rose-planting was not prosecuted vigorously in 1917 and 1918 because of the extraordinary activities

of everybody in the community on account of the war, but the drive was taken up actively again in 1919, and in each successive year since.

In 1921, for the first time, the newspaper campaign to obtain pledges was supplemented by the Boy Scouts of Charleston. This city, I believe, has more Scouts per capita of population than any other. The boys carried the pledge to every house in city and suburbs. They asked for signatures, and left a free printed circular containing simple instructions as to the planting and care of roses, the selection of varieties, and kindred matters. In every case the Scout worker promised to come later and assist the householder in planting the roses, provided his assistance was wanted.

The Scouts continued their coöperation in the spring campaign of 1922. The results were wonderful. A total of 2,807 persons, nearly all of them heads of families, promised to plant a total of 17,204 rose bushes during the season of 1922. Last year's pledges were printed in the newspaper, day by day, as during the earlier years, and at the end of the campaign the whole list was assembled and printed again. It filled solidly two pages of the paper, and of course made a most impressive showing for the rose-city scheme.

The newspaper publication of articles on roses, with personal mention of special successes or failures, is, of course, continued throughout the season and to some extent in the winter as well.

In May last we held our first rose exhibition—a community affair. The weather proved to be abominable, but for a first effort the show was considered a great success. There were some sixty exhibitors. Unusually fine specimens were shown, and judging was done according to American Rose Society standards. Ribbon prizes were awarded.

We have all learned much about roses during these early years of effort. Best of all, hundreds of our people to whom one rose bush used to be about the same as another, have learned the advantage of buying good stock. They are learning that the rose gives to them in about the same proportion as they give to it. This, of course, means better cultural methods. We believe that Charleston is really to be a great rose city. Anyhow, it has a fine start!

What Roses Are Really Hardy?

By J. H. NICOLAS, Indianapolis, Ind.

EDITOR'S NOTE.—The question of rose-hardiness without protection in zero temperature with truly American fluctuations, with unfavorable snow, moisture, wind, and sunshine conditions is of the utmost importance. If we can determine what varieties are dependably hardy under known conditions, we will assuredly be able to have more beautiful roses in more places. Too often it is assumed that the protection given is necessary because the roses have survived, there having been no "check" to determine the necessity of such protection.

Mr. Nicolas has experimented definitely and with full study of the conditions. His showing is most interesting, and its value will be increased with the next report. Who else will "do likewise" in the general rose interest?

IN my missionary work to make rose-lovers out of golf-players and other wasters of time, the greatest objection I have met was the belief that the finer roses, the Hybrid Teas, are not hardy, coupled with the fear of serious losses unless the gardener went to the great trouble of providing what he believed to be adequate winter protection, and, pointing to my own garden as an illustration, I had no argument to offer to dispel that fear. Therefore, I resolved that this winter I would not cover my roses, and would "trust to luck" in an effort to ascertain which Hybrid Teas could be considered hardy in Indianapolis under normal winter conditions.

I must say, however, that I am not enough of a gambler to take any chances with new or rare imported varieties not yet on the American market, wherefore these, together with my own Hybrid Bourbon, Lucy T. Nicolas, were well and safely tucked in the straw bottle-covers which, I think, provide the ideal protection, even though some friends have unkindly therefore nicknamed my place the "Chateau de Champagne."

I enlisted the interest of the local "weather man," who kindly gave me access to the records of his office, which I submit herewith in a condensed form for comparison.

Our winter has been abnormal, and, I would say, very hard on plants. The mean temperature for November and January was several degrees above normal, and for December about normal (only 0.8 in excess) but with sudden changes. For instance, the mercury went from 38° on December 3, to 60° on the 4th, to drop to 27° on the 5th, 24° on the 6th, and again

reach 61° on the 7th, 63° on the 8th, then down to 26° on the 9th, etc., while, on the 18th it stood at 1° below zero. February was below normal. The relative humidity was high, but it is every winter, so, according to records, we will call it normal, but several times it reached 100, the saturation point, and each time with a freezing temperature which caused a nice little coating of ice on the shrubs and trees. The abnormal conditions were accentuated by the deficiency of snow; during November, December, and January we had only seven days with snow on the ground, the maximum being 2.4 feet, which lasted only three days. The velocity of the wind has been above normal and the percentage of sunshine was normal. On the whole, February was very severe, averaging 24° (which is 6.2° below normal), with a minimum of zero. The wind was high, reaching 54 miles per hour and averaging 28. For three days, February 14, 15, and 18, the combination of 3° temperature following 100 per cent sunshine certainly was not a healthy one for roses. Under such climatic conditions, I think that the varieties of Hybrid Teas that have survived without apparent injury may be recommended as reasonably hardy.

A close inspection on February 24 revealed the following condition of plants without protection of any kind—not even heaping the soil around the base.

In all, fifty-eight varieties were exposed.

Eleven were found dead to the ground: Milady, Antoine Rivoire, Prince Charming, Columbia, Mme. Edouard Herriot, Janet, Angelus, Betty, Premier, Climbing Mme. Jules Grolez, Harry Kirk.

Twelve were found dead down to a few inches from ground: White Killarney, Killarney Brilliant, Kaiserin Augusta Victoria, Killarney, Louise Catherine Breslau, Los Angeles, Seabird, Mme. Jules Grolez, Laurent Carle, Gen. MacArthur, Hadley, Souv. de la Malmaison.

Thirty-five do not show any ill effect: Mme. Butterfly, Hoosier Beauty, La France, La Champagne, Gruss an Teplitz, Lady Ursula, Chateau de Clos Vougeot, Richmond, Ophelia, Mlle. Franziska Kruger, Meteor, Francis Scott Key, Independence Day, Bertha von Süttner, Sunburst, General-Superior Arnold Janssen, Duchess of Albany, Lady Ashtown, Golden Ophelia, Mme. Caroline Testout, Etoile de France, Mme. Eugene Marlitt, Mrs. Bryce Allan, Mme. Eugene Boullet, Dorothy Ratcliffe, Lady Alice Stanley, Rhea Reid, Radiance, Red Radiance, Chrissie MacKellar, Climbing Mrs. W. J. Grant (Climbing Belle Siebrecht), Climbing Mme. Caroline Testout, Climbing Kaiserin Augusta Victoria, Climbing Monsieur Lédé, Climbing Souvenir de Claudius Denoyel.

This report is to February 24 only, and other interesting observations may be made later. For instance, whether the



PLATE VI. The Wichuraiana Hardy Climber, ALIDA LOVETT, as growing in the Editor's Garden

Originated by Dr. W. Van Fleet, 1905; *Rosa Wichuraiana* × Souv. du President Carnot
(Reprinted by permission from "The Rose in America," by J. Horace McFarland.)

ones killed to the ground will come up again, and to what extent, and whether the growth and vigor of the others have been affected. A further report covering these fifty-eight varieties will be made for the 1924 Annual.

CONDENSED WEATHER REPORT FROM THE UNITED STATES WEATHER
STATION AT INDIANAPOLIS, COVERING THE TIME
OF THESE OBSERVATIONS

	November	December	January	Feb. to 24th
Temperature—Highest	69°	63°	56°	50°
Lowest	22°	-1°	19°	0°
Mean	45.4°	33.4°	34.6°	24.3°
Departure from normal	+3.8°	+0.8°	+6.2°	-6.2°
Greatest daily range	24°	35°	27°	29°
Relative Humidity—Maximum	98%	99%	100%	100%
Minimum	32%	44%	44%	37%
Departure from normal	none	+2%	+1%	+1%
Precipitation, Total	2.32 ft.	4.45 ft.	2.70 ft.	0.81 ft.
Normal	3.52 ft.	3.04 ft.	2.81 ft.	
Snowfall, Total	0.2 ft.	2.6 ft.	0.6 ft.	2.9 ft.
Normal	1.1 ft.	5.2 ft.	6.8 ft.	
Wind, maximum velocity	39 miles	38 miles	42 miles	54 miles
Average hourly velocity	12.4 miles	12.6 miles	14 miles	28 miles
Normal hourly velocity	11.3 miles	11.6 miles	12 miles	14 miles
Prevailing direction	S	S	W	W

A Rose Report from Southern Ontario

By CHESTER D. WEDRICK, Nanticoke, Ont.

EDITOR'S NOTE.—Each year the American Rose Annual has contained experiences and helps from Canada. There can be no question as to the high place given to the rose there, especially in the southern border of Canada. The paper which follows presents some intimate experiences which ought to be of value to those in the same climatic range, and of interest to all.

THE rose has always been a favorite of mine, and I continue to maintain quite a large collection. I am particularly fond of the hardy climbers, which if they are so handled as to make solid and not soft growth toward the end of the season and are kept free from insects, are generally hardy here, even when unprotected. Where roses are not properly fertilized and make a soft, sappy growth, they are likely to freeze.

Two old-timers that I like very much are Euphrosyne and Thalia, which are grown without trellises, loading themselves with flowers in early June, to be followed by a fine crop of berries which persist until midwinter. I have also a yellow rambler, Loreley, that is a beauty, and the old Crimson Ram-

bler does well with me, without mildew. I have also, and like, Dorothy Perkins, Lady Gay, Farquhar, White Dorothy, Excelsa, and Tausendschön.

American Pillar, planted along the east side of my house, makes a wonderful show. It is protected, where it is planted, against severe drying winds. Where I must expose the climbers to such winds in order to produce the effect desired, as is the case on a southern veranda where I have several of the Dorothy Perkins type to climb up the pillars and run along the porch, I use the following method: When the ground is frozen and a mild day follows, the rose canes are untied from the pillars and laid down practically flat on the ground, being held in place by bricks along the base of the veranda. They are then covered with leaves, held down by coarse poultry netting.

Among other good climbers with me, Wichmoss, Paul's Scarlet, Birdie Blye, and Climbing La France are quite satisfactory, the latter being, of course, protected.

I like the *Rugosa* hybrids, of which I have all that are in commerce, I think. With me *Magnifica*, *Roserie de l'Hay*, *Sir Thomas Lipton*, and *Agnes Emily Carman* are continuous bloomers. One of the Lipton bushes is over eight feet high, and broad in proportion, being full of flowers all the time. *Nova Zembla* is one of the most exquisitely colored roses known.

Hugonis does well with me, and is a "gem of the first water."

We do not need to do without Hybrid Teas here. I have a *Mme. Caroline Testout* fifteen years old which had, last June, seventy magnificent buds and flowers on it at one time. All of these Hybrid Teas are protected with soil, which when frozen is covered with leaves held in place by poultry netting. All are own-root roses, and I like them best, as I have a natural rose soil.

Frau Karl Druschki is the finest of all the Hybrid Perpetuals here, but as it is without perfume I do not care for it.

Why do we not have some Climbing *Rugosas*? The *Rugosa* blood seems to offer an excellent opportunity to give us superb new colors and forms, and I should not be surprised if *Max Graf* will get into the connection as soon as the hybridists wake up.

Last September I motored down to St. Catharines, seeing in the fine civic rose-garden, established there by the late Mayor Burgoyne, an excellent assortment of bloom even then.

A Rose-Garden in Kansas

By REV. J. A. B. OGLEVEE, Caldwell, Kans.

EDITOR'S NOTE.—With this personal account we enter another zone of rose possibility. Mr. Oglevee, pastor of the First Presbyterian Church in Caldwell, Kans., has pioneered toward rose success.

His hints—to put it mildly—to the catalogue men ought to be heeded, but the Editor has excellent reason to believe that some of them neither read the Annual nor test their roses anywhere, save at the expense of their trusting customers. If only there would be a disposition to tell all the truth, and to know that certain varieties were best or not best for certain zones, how many more roses they could sell!

The suggestion as to zone trials is a worthy one, and it is hoped that some wise rose merchant will take it up.

I WANT to name some of the kinds of roses that do well in central southern Kansas, for a rose that does well in Pennsylvania may not do well out here.

Some of the rose catalogues are quite misleading in their statements. They describe rose-growing in the East, and give directions for planting and care there, which may not do out here at all. Then they are apt to tell only the good qualities of a rose, and not to mention the bad ones. Why not tell the whole story? If a rose has its weak points we should know it before we buy it. In some catalogues each rose is described as if it were the best one in the book, and even Tea roses are called “hardy as an oak” or “hardy everywhere.” Such statements should not be made. Some send you anything they happen to have, and label it what you order. I have received Antoine Rivoire in red, Sunburst in pink, Ecarlate in white, Gruss an Teplitz for Red Radiance, and a Baby Rambler for Francis Scott Key!

Long ago the men who put out rose catalogues should have made a survey of the country and found out which roses are adapted to each section, thus saving their patrons much time, labor, money, and disappointment. Farm implement manufacturers send experts out here into the Kansas wheat-belt to find out what kind of machinery and implements are required by our farmers. In the same interest, rose concerns should have several men in each state to operate small rose-test gardens to try out and ascertain the kinds that do well in each locality.

There need not be much expense connected with this, aside from supplying the roses to be tested. I feel sure there are persons in each state who would be glad to conduct such tests for their own pleasure, and without pay. To start the thing, I offer my services.

But, if the catalogue people will not undertake this, perhaps it is up to the American Rose Society to take the matter in hand.

I have spent thirty years learning how to grow roses on these prairies of Kansas and Oklahoma. The process is very different from that in Pennsylvania, where my mother had her rose-garden.

Almost out of the Rose Zone—far out on the great “American Desert,” where only a comparatively few years ago vast herds of buffaloes roamed at will, one would scarcely expect prophecy to be fulfilled, and the “desert to blossom as the rose.” But I have tested that prophecy, and it has come true. Of course, there are some obstacles to be overcome. High winds sweep these prairies; hot winds burn things up; droughts are sometimes most severe. However, I have some forty-five rose varieties now in my rose-garden, after discarding many that could not stand up in our climate. Some are doing fairly well; some are doing exceedingly well; some, I am compelled to say, that have a good reputation elsewhere, are almost worthless here.

I want to tell especially about my experience with Maman Cochet and White Maman Cochet as very much the best for this part of Kansas and Oklahoma, of all the roses I have tried.

On March 20, 1920, I planted a dozen each of Maman Cochet and White Maman Cochet in extra-large, two-year-old, field-grown, budded, dormant bushes. At the same time I planted a dozen each of White Maman Cochet and Maman Cochet in one-year-old, own-root, little pot plants. They were called one-year-old plants; they were probably not half that old—merely small rooted cuttings. I put glass fruit-jars over them until they began to grow well. But how they did grow! They wanted to bloom in a month, but I kept the buds picked off until fall, when I left one or two buds on each plant bloom to see if they were true to name. The two-year-olds I left bloom the first summer. Not one of either kind or size died, and they are all yet living and thriving. My Cochets are hardier than

many of my Hybrid Teas; they get through the winter better, and they are also very easy to start from cuttings.

For all of these Cochets I am writing about, I dug holes two and a half feet deep and a little wider than my spade. I put six inches of broken stones in the bottom of each hole and pounded them down solid. Then I put in a solid foot of well-rotted cow-manure, and tamped that down solid. The top foot I filled in with good rich soil and well-rotted manure, half and half, well mixed together, leaving the top in the shape of a basin so as to hold lots of water—two to three gallons.

When I told an inquiring neighbor how I made these holes, he said: "That is entirely too much work." But the canes on my bushes were thicker than my thumb (I have a large hand), while his were mere pipe-stem affairs, without any roses on them. I soon convinced him that it paid to do the work my way.

During the hot summer months I watered three or four times a week. A neighbor came over one evening, and said: "I want to see what you are doing here." I was filling the basins around my bushes with water. He exclaimed: "Why, is that the way you do it? My book says the bushes must have good drainage, and so I hilled up around them so the water could run off, and they all died!" Certainly; he starved them to death!

A friend was in the other day, and asked, in great surprise: "How is it that your rose-garden is a mass of bloom, while my bushes have scarcely a rose on them?" I showed him why. I kept each bush heavily mulched with old manure all summer, and the water going through this manure became liquid manure. How the bushes did grow!

I kept new growth coming on all through the summer, while my friend let his stop growing. In the fall I cut all the bushes down to within eight to ten inches of the ground, and drew the soil up around them to their tops, and put hay, leaves, and litter on top of that.


I uncovered them on March 24, and trimmed them some more—leaving them six to eight inches high. I allowed them all to bloom all they pleased this second year, and by fall the little baby roses of the year before were as large or larger than the two-year-old, field-grown, budded bushes. They had great

thick canes three feet high which were covered with lovely blooms—blooms larger than Frau Karl Druschki, and on stems from one to two feet long.

When asked how I did it, I told my friends that it was because I fed them with good wholesome food. Manure is the food of the rose bushes, and you must feed them to the limit if you expect to get big bushes and good roses. When you want to fatten an animal you put him on full feed. You have no right to expect your rose bushes to thrive on starvation rations. My bushes are so big and strong that the bugs, slugs, and grubs do not hurt them, and they can stand a lot of frost.

This past summer—the third season with these Cochet—was a most trying one on account of hot winds and a long dry spell. But by watering plentifully every day, and by heavy mulching, I got them through in good condition, and for some weeks past I have had a veritable riot of splendid blooms. And, after gathering hundreds of roses today (November 14) my garden is still a mass of bloom in all colors.

Now let me name a few other kinds that do well here. I have an extra-fine bush of what I bought for Countess Clanwilliam. There are thirty-seven gorgeous roses on it now. They attract as much attention as anything I have. Lady Hillingdon does well, and Willowmere, Lady Pirrie, and Lady Alice Stanley produce buds that are wondrously fine. Laurent Carle, General MacArthur, George C. Waud, and Etoile de France grow fairly well, and dazzle the eyes of the lovers of red roses. Radiance grows luxuriantly, is always in bloom, and has many admirers. For once I have a really good bush of Duchess of Wellington—and such roses! Columbia grows well, and blooms well, and is fragrant, but the blooms are not as beautiful as Maman Cochet. Ophelia and Mrs. Aaron Ward do well. Frau Karl Druschki grows well, but is sometimes injured by our winters.

 On page 38 is the rose choice of all America for the best dozen bush roses and climbing roses.

Montana Speaks Up!

By MRS. CHARLES E. MEAGHER, Missoula, Mont.

EDITOR'S NOTE—To us who live perforce in the "effete East," it is altogether delightful to get a real, live message from the West—with a capital W! But Mrs. Meagher makes some very practical suggestions to the catalogue men. The Editor believes in the commercial value, to disregard the ethical decency of it, of just such concrete honesty and suggestion by districts and for beginners. It is right, and it will pay; but it will take investigation and work, both of which seem hard to start in unconventional lines.

SOME folks say that Montana has only two seasons—winter and August—but that is a slander, started, no doubt, by some envious Californian. The truth is that, usually, we turn on the sunshine and balmy breezes again about Christmas-time, just to show the Californians where "God's Country" really is; and then, when we are going good in our last summer's organdies and ducks, California, jealous of such sturdy competition, pushes a button and the North Pole spills a blizzard right in the sunniest spot between there and the Equator.

We Montanans are, however, willing to admit that our winters are somewhat capricious, and when the neophyte in Beauty's garden finds his "two-fifty per" offerings killed to the ground in the springtime, he is quite likely to be easily diverted to less expensive joys.

I think we would have fewer "never again" rose-growers if beginners could be encouraged to start with own-root plants of parcel-post size. "Them was happy days" when we could buy 20 for \$1!

Montana is a country of gorgeous scenery, unlimited possibilities, and truly magnificent distances, and in the section where I live, where "the mountains are literally quite everywhere," we use them for property lines; but, when you feel a compelling urge for a nice quiet chat over the back fence with a sympathetic neighbor who will listen while you unburden a few ladylike remarks about the brass-billed beast that has just ruined your "beautifullest" bud, you can't always find time to climb your personal mountain to wig-wag someone in Idaho or North Dakota.

I assume that I am entirely right in believing that the primal

and fundamental purpose of the American Rose Society is to stimulate interest in rose-growing. From this point of view we are, perhaps, less concerned with the grower who seeks only a brief summer's pleasure than with that great majority whose time and means for any sort of pleasure are strictly limited, yet who form that perpetual flux out of which is developed all permanent advance.

The man who buys roses as he would buy candy and theater tickets needs, I think, only this counsel: "Go to it! Buy the very best you can afford. Like high-class confectionery and best seats, your one-season roses ought to be most satisfactory."

But while the interest of this wealthy amateur is of great importance, he is not often one of that great majority who will carry water in a bucket for his thirsty rose children, or consider hopefully (a la Dean Hole) the occasional horse that visits his premises, and who gets results that fill his neighbor fifty feet, across the lot, with a holy envy and a vigorous ambition to go and do likewise.

These are they who are not without appreciation, but who must be educated to appreciate the best. Here is where the Commercial Grower can do much more, I think, than has yet been done to disseminate accurate knowledge of and a desire for the Queen of all Beauty.

He, the C. G., in following up the fascinating opportunities disclosed by the development of his business, seems to have lost sight of the fact that in the catalogue he now distributes indiscriminately, he presents such an embarrassment of riches that the would-be beginner is lost in confusion.

One of the best catalogues I know rather emphasizes the necessity for some "know how" on the part of the beginner. Unquestionably he will do better than the uninformed, but he is already on his way! My particular concern is for the beginner who lacks "know how," but who, found with the desire and the will to do as he is told, will, if he is properly guided, soon achieve a degree of success sufficient to determine in him an ever-increasing ambition. To reach this class, I think some change in, or perhaps I should say some addition to, the present propaganda is advisable.

Of course, all distributors have some method for indicating

the different classes of roses, but how much meaning do you think a person would get out of $+$, $-$, \times , \div , if he knew nothing whatever of arithmetic?

I know of only one catalogue that shows in a simple, clear manner the arbitrary difference between garden, shrub, and climbing roses.

Now am I being asked for a suggestion? Thank you; here it is:

That the commercial grower who distributes own-root roses arrange a beginner's lot of plants for parcel post delivery showing clearly:

(1) The arbitrary class differences between roses (some of the simpler distinctions in each class might also be added); (2) clear but emphasized directions for the planting of each class (shrubs and climbers demand only simple preparation, and survive much neglect, while, with the garden varieties, the first year means much for or against future satisfaction); (3) that the garden class list be limited to those of well-established vigor and freedom of bloom. Preference for perfection will come later.

This suggestion could, of course, be embodied in the regular catalogue, but the separate list, I think, would make for much less expensive and more widespread propaganda, and the regular catalogue could be used for "follow up." But, after all, far be it from the dispenser of free advice to worry about the troubles of the "advisee"!

While the foregoing suggestion may seem gratuitous, nevertheless it helps, indirectly, to answer an implied question—"Why do I insist on own-root roses." I don't! I do advocate the advantages of this class, first, because these are the least expensive for the beginner who has much to learn and must pay in losses and disappointments for his ignorance, and second, because, if he is helped in his selection and follows directions as to planting and care, he is indeed out of luck if all of his plants refuse blossoms the first year. Even having attained perhaps only one blossom, he will have acquired a bit of practical experience which will so grow and increase that it will nevermore know any limitations but the best possible.


A more local reason for advocating own-root roses is that in the capricious winters of the eastern Rocky Mountain region,

garden roses are only too frequently winter-killed to the ground, and in the spring, when the beginner is confronted with some strange growth from the under-stock that is without interest or beauty, he is very likely to get that "never-again" feeling. He feels sure that somehow he has been "stung." If he found himself out \$5 or so for a rotten show he would take it out in cussing—and go again! But when it is something that has cost him so much hard work, do you think he will react that way? It would be better had the plants died, for then he would blame it on the severity of the winter, and, the initial expense having been light, he would replace.

I do not prefer greenhouse-grown roses for the garden for any reason whatever, but I do not know any distributor who specializes in one-year field-grown plants for parcel-post delivery. A very fascinating California catalogue just received makes no mention at all of parcel-post delivery. Two-year greenhouse-grown roses would not be considered at all by an amateur with any "know how," and business ethics may forbid any public counsel against the use of such stock.

I advocate the one-year roses primarily because of the difference in expense—a point of importance with a large number of the people we are considering as subjects for propaganda, and I know from experience that a gratifying percentage of bloom can be had the first year from these plants if the right kind are selected and planting directions are followed. The amateur with some "know how" will prefer to let these little plants make their second year's growth before blooming.

Except for the advisability of own-root roses for our climate, there is not any difference in growing methods between here and any other place in the Temperate Zone, and consideration of our limitations would be of local interest only.

 Many important, even if short, items of rose interest are included in "Rose Notes," beginning on page 176,

Roses Every Day in the Year!

By MRS. JAMES M. RHODES, Santa Barbara, Calif.

EDITOR'S NOTE.—Truly astonishing is this story of continual bloom! It should be noted that Mrs. Rhodes seems to have succeeded in keeping her roses going all the year, without the rest heretofore assumed to be necessary.

IN 1916, I started a garden in the Montecito valley, just outside of Santa Barbara. It was a bare field, with not a tree or shrub on it. Today, April, 1921, it is one of the prettiest small gardens you can find anywhere. As you enter, the gateway is arched with English ivy; on the lawn are four trees, each over thirty feet high, of acacia, araucaria, live oak, and Italian cypress. A pergola toward the house is entirely covered with vines, beginning with the rose, Reve d' Or, which holds its leaves all winter. It has today (April 21) over one hundred flowers on it, and it blooms a little every day of the year. The other vines are a purple and a white wisteria, for spring bloom; a white tecoma for summer bloom, and *Kennedya prostrata major* (sometimes known as *K. Marryattæ*) with lovely purple flowers during the winter. At the base of this pergola are massed irises, heliotrope, and white freesia, the latter multiplying each year and providing a mass of white bloom all winter. Around the north side of the house, my beautiful rose-garden comes into view, with the mountains as a background. Looking from the house, over this rose-garden, there is a lovely picture, and I have rose bloom all the year.

The walks are bordered with box a foot high. Inside are the rose bushes, three feet apart and with large clumps of violets between each rose, so placed to protect the roots of the roses from the very hot sun in summer.

I did this planting as an experiment, for here in Santa Barbara people plant nothing in their rose-gardens but roses, and after they bloom in the spring, they cut them back very severely and keep water from them for five to six weeks, to rest them, which, of course, gives them fine bloom in the fall. My garden, however, being just outside my house, must be beautiful all the time, so I tried the experiment of putting violets between the roses, while also avoiding the usual pruning.

Every day I cut the flowers with long stems, keep all the dead flowers removed, and if the plants grow out of shape, I trim a little here and there, with the result that everyone remarks on the fact that my garden is always neat and a pretty picture to look at.

In the winter, during the rainy season—January, February and March—the violets bloom, with stems fourteen inches long, and the garden becomes a purple garden, with a few roses to brighten it up. There is a pool in the middle of the rose-garden with many freesias around it, giving the touch of white which I think all gardens need.

I chose nearly all Hybrid Tea roses for this garden, including Lady Hillingdon, Mme. Mélanie Soupert with roses that measure seven inches across, Los Angeles, Antoine Rivoire, Jonkheer J. L. Mock, Pink Radiance, Mme. Leon Pain, Willowmere, Mrs. Wemyss Quin, Rayon d' Or, Ophelia, and Mme. Edouard Herriot. I find the last a glorious color, but a poor bush. Rayon d' Or, a lovely rose, is a very shy bloomer, and the bush is irregular in shape. Hadley, General MacArthur, and Hoosier Beauty are glorious, but the best in my garden are Irish Fireflame and Irish Elegance; they bloom all winter. I have two bushes of Irish Fireflame fifteen feet high.

I have heliotrope up to and over the roof of my bungalow, and it blooms every day of the year, a salmon-pink geranium keeping it company, also grown up over the roof. The two together give a good color effect all the time.

On a fence that entirely surrounds my home, I have climbing roses at each post: Climbing Papa Gontier, Gold of Ophir (rightly Fortune's Double Yellow), Climbing Mme. Caroline Testout, Climbing General MacArthur, Alberic Barbier, William Allen Richardson, and Climbing Frau Karl Druschki, which latter gives bloom off and on all summer.

The Banksia rose covers a small pergola, and a Lady Gay is fine on a fence between our place and the next one. There is a vine, *Bignonia violacea*, that covers the sides of the patio, and goes over the roof; it blooms all summer.

Santa Barbara has the climate and soil to grow everything, and I hope some day to see a botanical garden here, and certainly a rose-garden that will show all the newest roses.

Seeing California Rose Conditions

By JOHN C. WISTER,
Secretary American Rose Society

EDITOR'S NOTE.—When it appeared that Mr. Wister would have opportunity on a long western lecture trip to visit some important rose stations, he was asked especially to see Father Schoener and Capt. Thomas and to report for the Annual upon what he saw.

So much of mystery has surrounded the work of Father Schoener, and correspondence with that enthusiastic but peculiar rosarian has been so electric with charges and claims of incomprehensible character, that Mr. Wister's actual contact is of much importance. It leads to the hope that Father Schoener, who seems to be using or expecting to use in cross-breeding many of the rose species with which Dr. Van Fleet had so auspiciously begun, may be inclined to have his productions put on equal test with other new roses in many localities outside the special climate which makes a California success no criterion of success elsewhere.

We will all welcome good new roses from Father Schoener, or anyone else who proves claims with performance. Mr. Howard's Los Angeles and Mrs. S. K. Rindge, for instance, were thoroughly tested in the East before they were even named, and the same facilities and fairness are open to Father Schoener.

Of Capt. Thomas' western beginnings the account is most interesting. No man in America has put so much of resources and spirit combined into rose research along certain lines as has this Pennsylvania-Californian.

I REACHED California the last week in January, in a cold, driving rain-storm which was snow on the upper mountains.

I have not been so cold all winter as I was in Los Angeles, and it seemed very strange to see the tenderest flowers, such as poinsettias, callas, heliotrope, and strelitzias in bloom outdoors, and apparently perfectly happy in spite of the cold. The California people, like all true gardeners everywhere, all told me that I had come at the wrong time of the year to see flowers, and that nothing was in bloom. In spite of this, I found wonderful gardens and flowers everywhere I went.

In Santa Barbara the cold storm was over and the weather was mild and lovely. There were a great many roses—hardly a yard or garden in the whole town failed to have them in bloom. The most popular varieties seem to be Mme. Alfred Carrière, Cherokee and Pink Cherokee, Ragged Robin, Marie van Houtte, Banksia, William Allan Richardson, and, of course, Maman Cochet and White Maman Cochet. Occasionally I saw Reve d'Or, another Noisette; but the great mass of

Tea and Hybrid Tea roses had been pruned back in December, and were not in bloom.

One of the first gardens I visited was at the Mitchell estate, in Montecito, which will be of interest to all rose-growers because Mrs. Mitchell is the Miss Lolita Armour, for whom Mr. Howard's famous rose was named. It is a wonderful place, with big trees and gardens and fine flowers, but few roses were in bloom as they had been pruned late to bloom in March when Mr. and Mrs. Mitchell would arrive. I had never seen such tremendous plants, however, and was especially attracted by some specimens of Los Angeles which seemed as strong and sturdy as Conrad Ferdinand Meyer in the East. The plants had been pruned back to the height of about six feet, but the superintendent said they had been at least four feet higher!

Another interesting spot in Santa Barbara to all lovers of roses is the nursery of the Rev. George M. A. Schoener. I was glad to meet this breeder of roses whose name, of course, is known to all readers of the Rose Annual. As is well known, the work of many years of rose-breeding was destroyed in the fire in which he lost his home in Oregon in 1915, but he has started up again in Santa Barbara and has many new roses which ought to be of interest to rose-growers in all parts of the country.

He seemed quite chagrined that I should come at this time of year, complaining that people came when his plants were dormant and then went away and said that he had nothing. I tried to persuade him that even though I was not a Californian I at least knew enough about roses not to expect to see them bloom in the dormant season, and I felt amply repaid for my visit in seeing his interesting plants and some of their distinct characters. The pleasure of meeting Father Schoener, however, was somewhat marred by finding that his attitude toward the American Rose Society was distinctly unfriendly. I did my best to convince him that the Society had but one object, which was to make the rose more popular in America and to encourage rose-growing in every state, and that never during my connection with the Society had I seen or heard the slightest hint of prejudice against him or his roses. He seemed to feel that his productions had not had the same attention as the varieties of other breeders. If this is so, it is no fault of the Rose Society,

but is, no doubt, due to himself because he has declined to send plants out for testing in comparison.

The curiosity and interest in Father Schoener's rose work arises mainly because he is said to have used in his breeding not only the garden roses but a number of rose species* such as: *Rosa gigantea*, *R. macrocarpa*, *R. abyssinica*, *R. bracteata*, *R. clinophylla*, from India; *R. sericea*, *R. Prattii*, and *R. Moyesii* from China; *R. rugosa*, from Japan; *R. Ecæ (xanthina)*, and *R. foetida*, from Persia; *R. baicalensis*, from Siberia; *R. acicularis*, from Alaska; and *R. nuthkana* from Oregon.

Father Schoener told me that he had grown upwards of 300,000 seedlings. His catalogue lists nearly fifty varieties selected from these seedlings. It will be several years before, after general trial, we shall know how many of these varieties will succeed in the different parts of the country, but the parentage of some of them at least indicates that they should be hardy. Arrillaga, for instance, is a cross of a Provence rose \times Mrs. John Laing \times Frau Karl Druschki, which certainly would indicate that it would stand our coldest climates.

A rose that I noticed particularly in the fields on account of its strong growth, was Dakota, said to be a hybrid between Conrad Ferdinand Meyer \times Lyon Rose \times *R. acicularis*.

From a theoretical standpoint it would seem probable that the two hardy parents might give this variety enough strength to overcome the weakness of Lyon Rose in the East. It was interesting to see a variety named for Mrs. Harriet R. Foote, of Marblehead, Mass., whose great rose-garden I had seen in midwinter two years ago, when it was covered with leaves, burlap, and snow. It seems important to get eastern reports on the variety Pittsburgh (*R. gigantea* \times Frau Karl Druschki \times Mrs. John Laing) for it will be interesting to see if the tenderness of *R. gigantea* is overcome by the other hardy parents. At Santa Barbara it has the largest bloom of the collection.

Of Santa Rita (Boursalt rose \times Gloire de Dijon) we can, of course, hope but little in the East, and can only envy the climates where such varieties can be grown without trouble;

*It is but truthful to note that the late Dr. Van Fleet had also assembled all these and many more species at Bell Experiment Station, in Maryland, and that he had succeeded in making crosses of the most important and interesting character, as fully reported in the issues of the American Rose Annual for 1916, 1917, 1918, 1919, 1920, and 1921.—EDITOR.

this is true also of the crosses of Gloire de Dijon and Zephirine Drouhin.

In the main, the varieties I saw seemed to have but little direct blood of the unusual species in them. That is, they were garden crosses such as many other breeders are making. Under California conditions they are certainly remarkable for vigor, but as I have noted above, it will take fair testing to determine which are suitable for less-favored rose climates—for almost any rose shows extreme vigor in southern California. Some of the *R. gigantea* hybrids showed as much as twenty feet of growth in one year in young plants.

I hope these roses will have a thorough testing in all parts of the country. Yet, on looking at the great number of varieties which Father Schoener has named, I could not help but feel, just as I feel when I see a whole new set by an Iris breeder, that they cannot be, all of them, superior to existing sorts. It seems a great pity that plant breeders who are doing such careful and painstaking work are by the very nature of their work forced to stay at home nearly all of the time, and do not get a chance to see what other breeders are doing.

On February 9 I spent a most delightful day with Capt. George C. Thomas, Jr., at his new 200-acre ranch at Beverly Hills, outside of Los Angeles. When he purchased this land, about five years ago, it was a wild hillside covered in places with native growth, and only a few acres around the ranch-house had ever even been touched by the spade or plow. This portion of the grounds Capt. Thomas decided to use as an experimental plot, and he has planted great numbers of species and varieties of ornamental plants and of the many fruits that grow in this wonderful climate. Now, in the third year after planting, he has good crops of oranges, lemons, limes, loquats, avocados, and other fruits that seem strange to the easterner. Among these trees laden with fruit were the peach, nectarine, apricot, and almond trees in full bloom, while in the shrubbery *Magnolia Soulangeana* was conspicuous among the cacti, palms, acacias, and eucalypti.

The situation is a magnificent one. It is about four miles from the ocean, and at an elevation of over 500 feet, commanding a stretch of seventy-five miles of ocean view from the San



PLATE VII. The Wichuraiana Hybrid, PAUL'S SCARLET CLIMBER
(Reprinted by permission from the 14th edition of "How to Grow Roses," by Robert Pyle.)

Pedro hills on the south, past Santa Catalina Island—forty miles out to sea, but looking very close—to Santa Barbara Island far to the north. Inland the view stretches over the great Los Angeles plain to the mountains in the background, and, on especially clear days, snow-covered mountains 125 miles away can be seen.

The greater part of this ranch is being developed by Capt. Thomas as a commercial avocado orchard, with lemons set as filler trees. He feels that the avocado is the greatest of all fruits in a frostless situation such as prevails on his hillside. There are also large plantings of lemons and persimmons, and the growth made by the trees in three years is remarkable, the lemons producing nearly 500 boxes of fruit this year. The soil is rich, friable, and deep, and is irrigated by gravity from wells and pipe-lines.

Capt. Thomas' great collection of roses is planted in the experimental plots around the ranch-house, but no formal rose-garden has yet been made, as the Captain felt that he did not understand California conditions well enough to choose the best varieties. After three years of testing and experimenting, he now feels ready to go ahead, and is just starting a rose-cutting garden on the terrace along the ranch-house. Here the conditions seem ideal, and in a year or two this garden should make a wonderful sight.

I cannot begin to tell the names of the many roses in the experimental plots. Arriving, as I did, in between seasons, most of them had been pruned back and were not blooming. There were, however, many beautiful flowers to be seen, especially in the Teas and Climbing Teas. I was especially glad to see some of Capt. Thomas' seedlings; there are some glorious things among them that we will want in eastern gardens. One of them, a single Rambler, has already proved itself in the East as a continuous bloomer during the summer months. The richest color I have ever seen in a climber was a single crimson which must be close to the variety Dr. Huey. A climbing Tea seedling of delicate pink and yellow coloring will probably be named for Capt. Thomas' daughter; a single scarlet-crimson Hybrid Tea was remarkable for its fragrance.

There seemed to be no end of wonderful roses on this small

piece of ground, and this in spite of the fact that Capt. Thomas has not yet really begun his California rose-growing. What a feast for rose-lovers this place will be in a few years!

A fitting climax to the visit was the pleasure of seeing Dr. Huey, and of hearing the discussion on all phases of rose-growing between him and Capt. Thomas. The question of rose stocks came up at once, and Capt. Thomas said Ragged Robin had, so far, been more satisfactory than Multiflora in California, but that Multiflora was still the best in the East, and that he did not believe roses on Ragged Robin were going to be satisfactory north of Philadelphia or Washington. He hopes the amateur members of the American Rose Society will more and more make recommendations on varieties and stocks, as they can do without suspicion of being influenced by any motive of personal gain. He feels that rose-growing the country over is injured by tradesmen who offer varieties only suited to special sections or to connoisseurs, without warning as to their needs. Picking up the catalogue of one of our best rose nurseries he read descriptions of Louise Catherine Breslau and Chateau de Clos Vougeot which were fairly accurate as far as they went, but which omitted to state that these were weak-growing varieties. He said that an amateur buying these varieties from such descriptions was grossly deceived, and that when the plants failed, this same amateur was apt to become discouraged, and say, "I can't grow roses." What the amateur today needs is sensible and disinterested advice on varieties suited to his section, and proper warning against the kinds that are difficult to grow in that section. I was glad to hear that Capt. Thomas has been working on such lists for the different climatic sections of the country.*

For years Capt. Thomas has been one of the most loyal members of the Rose Society, and I believe that the publication of his list of recommended varieties for different purposes in the different climatic sections of the country will be of the utmost importance to the amateur gardener.

*See Capt. Thomas' article "Choosing Roses Intelligently" on page 23 of this Annual.—EDITOR.

The Production of Rose Bushes in California

By GEORGE C. PERKINS, Newark, N. Y.

EDITOR'S NOTE.—It has been the endeavor of the Annual to keep members of the American Rose Society informed as to where and how roses are grown, as well as to candidly discuss the merits of various methods of plant production, from the standpoint of the actual consumer.

Mr. Perkins is the working head of one of the largest producers of rose plants, the Jackson & Perkins Co., which, because it is exclusively wholesale in its operations, is not generally known among the amateurs. Its great nurseries are in New York, New Jersey, and California, and it in addition wholesales the product of many other growers, handling usually more than a million roses every year. What Mr. Perkins writes, therefore, is from the standpoint of broad and definite knowledge. (See Plate VIII, facing page 93.)

IT has been the writer's pleasant fortune to go to California once or twice a year for many years past, partly on business and partly for pleasure. The business portion of his journeyings has kept him in rather close contact with California nurserymen, and particularly with nurserymen who specialize in rose growing. It has been with much interest that he has watched the increase of rose-growing in California since the exclusion of imported rose bushes, and to note the varying methods of propagation and culture which obtain in different parts of the state and among different growers.

A careful estimate of the probable output in the fall of 1923 of eight establishments, which produce the bulk of the rose-bushes grown in California, indicates the imposing total of over five million plants. This is allowing for a shrinkage of about 15 per cent between the quantities budded or propagated from cuttings and the quantities that will be actually marketed. This margin, under the very favorable conditions usually obtainable in California, should cover average shrinkage, except when something "unusual" (an overworked word in California) happens.

The total propagation and budding of the eight more important rose-growing concerns was nearly six millions of plants last year, divided nearly equally between "own-root" stock propagated from cuttings, and budded plants, worked mostly

on Manetti stocks, with Ragged Robin (*Gloire des Rosomanes*) also used extensively as an understock in the southern part of the state. Multiflora de la Grifferaie, *Rosa odorata*,* *R. multiflora japonica*, Seven Sisters, and some other stocks also are employed in a limited way.

In addition to the eight concerns who lead in the production of rose bushes, there are a number of smaller growers whose combined output would likely add half to three-quarters of a million to the total of California production.

Two of the propagators of own-root roses assist nature with some of the weaker-growing varieties in very interesting ways. One of them grafts wood of the weak-growing kinds on roots of Ragged Robin and then puts the grafts into his propagating frames to be handled just as his cuttings are handled. The other grafts wood of the weaklings onto wood of *R. odorata*, and then roots the wood of *R. odorata*. By the way, this *R. odorata* seems worthy of more general trial as a rose-stock. Quite to the writer's surprise it is apparently hardy in western New York, something we would not risk saying about Ragged Robin, which is a favorite stock in southern California.

There are several good points to Ragged Robin as a rose-stock. It makes long "joints" between the buds or "leaf-eyes, and there appear to be no adventitious buds or "eyes," either in these joints or in the roots, to sprout and form "suckers." Consequently, roses that are budded on properly "eyed" cuttings of Ragged Robin are practically free from suckers. They need give the planter no more trouble in this respect than own-root roses, and they have the advantage of greater vigor of growth. We think, however, that for cold climates there is much question as to whether Ragged Robin is sufficiently hardy for general use as a rose-stock. There has not yet been any very careful testing of it in this respect under varying conditions of soil, climate, drainage, and the like. In our own nursery experience in western New York, we once had a block

*This *Rosa odorata* is a form brought in from China by the Department of Agriculture, and numbered in the introductions of the Foreign Seed and Plant Introduction Office as 22449. It was collected as a climbing rose in a garden at Pautung Fu, Chihli Province, by the late Frank N. Meyer. It produces small, double white flowers with pale pink centers; its canes are slender, smooth and of very rapid growth, and it has proved hardy at Breeze Hill, Harrisburg, Pa., for three winters. The propagating method mentioned by Mr. Perkins was fully described and illustrated by Peter Bisset on page 38 of the Annual for 1919.

—EDITOR.

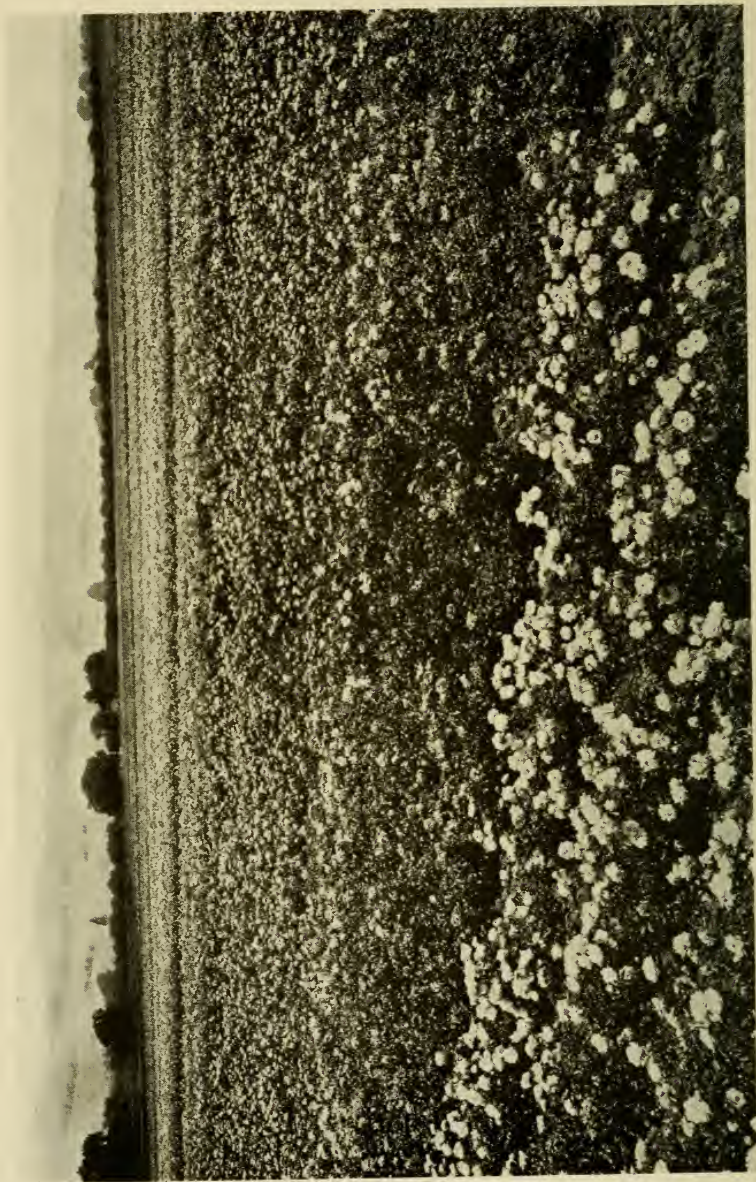


PLATE VIII. Field in a California Rose Nursery, in May, 1922. (See page 93.)

of *Multiflora de la Grifferaie* almost wiped out by an unusually cold winter, and we have always considered this a hardier stock than Ragged Robin.

A large California rose nursery, at the height of the blooming season, is a sight long to be remembered. The accompanying picture (see Plate VIII) is the product of a budding of 700,000—it looks like seven millions!—and the photograph was taken late in May. The plants are budded on Manetti stocks, grown from cuttings planted right in the nursery row. At first sight it looks as if every Manetti cutting grew and every bud “took.” It was an unusually good “stand,” but a careful count at digging-time revealed a substantial shrinkage between the quantities budded and the quantities dug, and a very considerable shrinkage from the quantity of Manetti cuttings planted.

The Manetti cuttings are purposely planted very close together, with the expectation that 25 to 40 per cent of them will fail to grow. Even with this shrinkage, the plants that are successfully budded usually stand so close together as to make very solid-looking rows. It is desirable, or almost necessary, to have them stand fairly close together in the rows or else they grow much *too* large under the very favorable California conditions of rich soil, irrigation, and abundant heat.

In California nurseries we have sometimes seen rose bushes, of one season's growth from the bud, with canes an inch and even an inch and one-half in diameter. Such excessively heavy plants, while they may impress some purchasers, do not transplant as well as plants of more moderate growth.

Formerly the California growers of budded roses allowed the buds to grow without any pinching back, which resulted in a large proportion of plants which had only one or two canes. Of late years the nurseries which have been growing for eastern trade have adopted the practice, generally followed in the East, of pinching back the bud-shoots soon after they start growth, for the purpose of forming bushier, better-branched plants.

There is great variation in the behavior of rose bushes in different California nurseries, although they grow large enough almost everywhere. In the southern part of the state there are two distinct growing seasons in each year. The first one is from about mid-April until August. Then, during the hot weather of

August and September, there is a period of semi-dormancy, and growth starts again through October and November. The growers of own-root roses, whose rooted cuttings are usually planted out in March, have to utilize both growing periods, while the growers of budded roses, having the under-stock well established from the growth of the preceding year, get amply sufficient growth of the buds during the spring and early summer. Irrigation water is usually withheld from budded roses after July, and by so doing growth is ripened up very effectively.

Rose bushes are badly subject to mildew in some parts of California, especially in sections where the days are very warm and the nights are cold. Red spider and black-spot are other troubles of the California rose nurseryman in many localities, but when the plants do grow they grow so rapidly that it rarely troubles him to get them large enough.

The section east of San Francisco Bay seems to have a climate particularly favorable to rose-growing. The writer remembers visiting in June a badly neglected nursery in this section. There had apparently been neither cultivation nor irrigation that season. The nursery was overrun with weeds, and the ground was nearly as hard as concrete. But in spite of such neglect there were rose bushes growing thriftily, the foliage absolutely healthy and free from black-spot, and producing bloom that was almost comparable to greenhouse-grown flowers in its perfection and size.

Let no one be alarmed over a future shortage of rose bushes in this country because of the shutting off of importations. California is already turning out more rose bushes than were imported in pre-war days, and, if the demand had not increased substantially in the last few years, there would already have been an over-supply. Fortunately for the nurseryman, the planting of rose bushes has increased marvelously, so that there have been few in surplus for several years past. The wonderful development of rose-bush growing in California, however, together with greatly increased production by nurseries in the East and South, should be ample to take care of probable planting needs of the immediate future.

A Spokane Bloom-Record

By WILLIAM L. LANGBEHN, Spokane, Wash.

EDITOR'S NOTE.—The western coastal regions of Oregon and Washington, with climate profoundly influenced by the Pacific Ocean, Puget Sound, and the Columbia River, are the rose regions of the United States. They are not unknown, nor are they voiceless! But of rose-growing in Washington away from this favored section little has been said, wherefore it is well worth while to present the bloom record carefully made by Mr. Langbehn. His record ought to be helpful in the immense area between the Cascade Range and the Rockies, and emphasis is laid on the fact that Spokane is 400 miles east of Seattle and Tacoma. Also, it is a good record for anywhere!

WE have seen rose-bloom records from nearly every corner of the country, but I doubt if anyone between the Rockies and the Cascades has ever taken the trouble to keep such a record.

With the kind assistance of one or two of the local nurseries, my wife and I have been enabled to secure quite a nice selection of roses, and because we love the flower and would have others share in our belief that Spokane can grow roses as well as more favorably located cities, we decided to keep a bloom-record. The inclosed is the result for two years, 1922 being also shown by the month.

In our test-garden we have about a hundred and twenty varieties, but because of their poor showing, many of them are not included in the record. In this record only good blooms are taken into account.

We all have our favorites, and the following ten would be ours, judging from their appearance in our little garden the past year, preference being in the order given: Los Angeles, Mrs. Arthur Robert Waddell, Rose Marie, Hadley, Killarney Queen, Florence Forrester, Frau Karl Druschki, Viscountess Folkestone, Crimson Queen, and Red Columbia. The latter in another year may be first, for it surely made a splendid showing, as it was only a small hothouse plant when I set it out in June.

Gorgeous is beautiful with us in June, but only fair after that. Hugonis blooms here the latter part of May.

Mildew was bad here in 1921, but practically nil in 1922. The only trouble we experienced the past year was with the rose curculio. (The bloom-record follows on page 96.)

NAME OF ROSE	1921	1922	June	July	Aug.	Sept.	Oct.	Plants set
Alexander Hill Gray		11	0	1	3	2	5	May 26, 1922
Antoine Rivoire		13	0	0	4	0	9	May 28, 1922
British Queen	44	39	11	10	3	3	12	1921 <i>g. 2nd</i>
Chateau de Clos Vougeot		4	1	0	1	2	0	April 10, 1922
Clara Watson	22	54	16	2	16	2	18	1920
Columbia	24	74	13	12	14	13	22	April 5, 1921
Crimson Queen		80	1	9	11	14	45	May 28, 1922
Edith Part	12	49	7	9	10	9	14	1920
Edward Mawley	20	30	12	0	5	3	10	April 5, 1921
Etoile de France	20	88	18	9	11	22	28	March 26, 1921
Florence Forrester	21	21	6	8	0	2	5	April 5, 1921
Frau Karl Druschki	47	121	33	81	0	7	0	1919
Gen.-Sup. Arnold Janssen	6	52	1	13	13	5	20	1921
Gorgeous	15	17	3	2	8	4	0	March 26, 1921
Hadley	34	121	16	31	29	11	34	April 5, 1921
Helen Gould (Balduin)		13	0	0	10	0	3	May 28, 1922
Hoosier Beauty		18	3	3	0	7	5	1922
Hugonis (Species)	May 21	May 28	0	0	0	0	0	1920
J. B. Clark	6	14	7	7	0	0	0	1920
Jonkheer J. L. Mock	27	29	5	2	11	6	5	1920
Juliet	21	47	40	1	2	4	0	March 26, 1921
Kaiserin Augusta Victoria	6	11	7	0	4	0	0	1920
Killarney Queen	71	130	12	18	24	41	35	1920
Lady Alice Stanley	11	35	4	7	10	5	9	1920
Lady Ashtown	8	21	2	4	2	3	10	1921
Lady Battersea		4	0	0	1	0	3	May 28, 1922
Lady Hillingdon	19	10	4	6	0	0	0	1920
Lady Pirrie	60	60	11	3	7	9	30	March 22, 1921
Laurent Carle	13	26	12	8	6	0	0	1920
Los Angeles	63	77	29	18	11	9	10	1920
Mabel Drew	27	31	4	8	6	6	7	1920
Marshall P. Wilder	61	65	27	38	0	0	0	1920
Mme. Abel Chatenay	8	40	7	5	10	3	15	1921
Mme. Caroline Testout	18	37	2	9	6	10	10	1920
Mme. Edouard Herriot	29	109	25	19	12	20	30	1920
Mme. Leon Pain	37	44	9	6	6	9	14	1920
Mme. Melanie Soupert	22	43	2	16	6	11	8	April 6, 1921
Mme. Ravary	22	85	16	18	14	22	15	March 22, 1921
Mrs. Aaron Ward	5	36	12	1	16	0	7	March 22, 1921
Mrs. A. R. Waddell	22	117	9	12	15	29	52	1921
Mrs. Henry Winnett	7	23	4	6	5	3	5	March 27, 1921
Mrs. John Laing	16	65	3	18	11	24	9	1921
My Maryland	5	13	3	0	2	2	6	1921
Natalie Bottner	10	84	6	0	20	23	35	March 29, 1921
Ophelia	38	91	11	20	21	14	25	1920
Paul Neyron	17	10	4	4	0	2	0	1920
Prince Camille de Rohan	28	34	28	6	0	0	0	1919
Prince de Bulgarie	15	56	13	7	9	9	18	March 22, 1921
Radiance	0	23	2	2	7	8	4	1922
Red Columbia		13	0	0	0	3	10	June 10, 1922
Red Radiance	53	44	12	7	7	11	7	1920
Richmond	24	67	10	21	13	8	15	1920
Rose Marie		31	0	2	7	13	9	May 28, 1922
Soleil d'Or	21	53	32	0	19	2	0	1920
Sunburst	5	13	1	0	1	2	9	1921
T. F. Crozier	0	8	1	0	1	0	6	April 10, 1922
Ulrich Brunner	26	98	33	55	0	10	0	1920
Viscountess Folkestone	55	162	27	65	19	21	30	1920
Wellesley	18	57	12	6	17	10	12	1921
White Killarney		11	1	0	2	3	5	May 28, 1922
White La France (Augustine Guinoisseau)	20	98	12	31	11	21	23	1920
Winnie Davis		18	0	4	4	0	10	May 28, 1922
Wm. F. Dreer		14	0	3	2	4	5	May 28, 1922
Wm. R. Smith	13	48	1	15	4	18	10	1920

Roses North of the Arctic Circle

By GRACE A. HILL, Berkeley, Calif.

EDITOR'S NOTE.—A hint received brought application to Miss Hill, well acquainted with the Alaskan flora, for information about roses in the Far North. She has responded not only with the facts, but with the lovely photograph of Noorvik Lake, reproduced as Plate IX, facing page 100. The location shown is far north of Nome and the Seward Peninsula. The lake is tributary to the Kobuk River, which reaches the ocean through Kotzebue Sound.

IT seems a paradox that the rose, that most exquisite of nature's plant creations, should thrive above the Arctic Circle, to gladden the eyes and hearts of those who sojourn there, but it is also a fact.

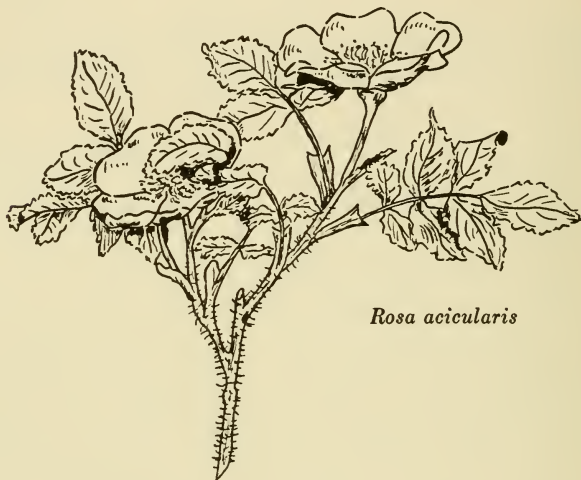
The most common Arctic rose, *Rosa acicularis*, sometimes called the "Circumpolar Rose," is widely distributed through northern Alaska, and has been collected on the Mackenzie River delta, at Fort Yukon, and in Arctic Siberia. I found plants of this species in the Eskimo village of Noorvik, on the Kobuk River, some thirty miles above the Arctic Circle, when I arrived there in September, 1915. Beneath the fir trees, in and about the village, *R. acicularis* spread its delicate, autumn-yellowed foliage, and displayed its bright scarlet fruit. The brilliantly hued hips, on their slender stalks, long continued to lend color and a friendly atmosphere to our fall landscape. The picture of Noorvik Lake which I am sending with this, shows the calm and placid loveliness of the location in which this courageous rose is completely at home.

The consciousness of the presence of roses beneath the snow gave assurance, not to say moral support, during the long dark winter.

When at last spring came, and the snow had gone, and the Arctic sun forgot to set, *R. acicularis* donned the deep green foliage of her species and swelled her promising buds in true rose fashion. And then one never-to-be-forgotten morning, in the last week of June, after a balmy, sunny night, the first blossoms were found spreading their bright, rose-pink petals and breathing their fragrance on the air. The world was better and brighter, and life well worth living, as these dainty blooms opened to their fullness of nearly two inches across.

This species has many forms, being most variable. There are subvarieties peculiar to British Columbia and Colorado, and there is also a Japanese form, but the Arctic Circle native is the one I saw and love especially.

Two other species to be found in the Arctic (though less frequently), and closely resembling *R. acicularis*, are *R. blanda* and *R. cinnamomea*. The latter, that rose of oriental sweetness, is reported by one Arctic botanist (Seeman) as



Rosa acicularis

occurring throughout the region between Point Barrow and the Mackenzie River.* Still other northern species, not yet reported from the Arctic, but possibly adapted to that region are *R. Woodsii* and *R. Macounii*, both of northern Canada, and *R. spinosissima* of northern Asia and Europe.

With at least three native roses holding their own unaided, does it not seem that there may be opportunity for rose culture, even in the Arctic, where roses would bring the maximum of pleasure and spiritual uplift to the human lives whose lots are cast, permanently or temporarily, in that for-the-most-part-unfriendly region?

**Rosa nulkana* is also reported as found in Alaska, though not so far north as the Kobuk River.—EDITOR.

Rose Happenings in America

PORTLAND—SEATTLE—THE FINGER-LAKE REGION—
BALTIMORE—DANVILLE

INCREASINGLY this Annual has endeavored to present rose history only as it has related to advances, discoveries, and real progress, rather than as it might detail the pleasant social features which are of major interest only to those who have participated. But in 1922 much happened that is of more than local interest. To encourage rose progress, extracts from correspondence telling of only a few of these happenings, as they related mostly to shows and contests, are here presented.

PROGRESS IN PORTLAND

The point most distant in America from the Editor's office is the point of greatest rose intensity, the Pacific Northwest. Let our forceful associate, Jesse A. Currey, tell the story:

More substantial progress in the cultivation of roses has been made in Portland during the past year than probably has taken place in any other twelve months since Portland established its reputation as "The Rose City."

One of the first big undertakings of the year was the establishment of "The Roseway" along Sandy Boulevard, the main artery leading to the Columbia River Highway. This work was fostered by the Portland Ad Club.

The 1922 Rose Festival in June was on a large and brilliant scale, though, due to weather conditions, it had to be postponed two weeks from the original dates. The display of blooms made by the members of the Portland Rose Society was a credit to that organization.

As the various branch libraries are the centers of the communities surrounding them, the city was divided into eighteen districts, and, through the coöperation of the branch librarian in each district, a competent, enthusiastic, and hard-working committee was selected, which undertook the staging and display of the best blooms from their own community or section of the city.

The greatest progress of the year in the way of permanent development has been the work accomplished in connection with the International Rose-Test Garden in Washington Park.

During the year the finishing touches were put on that section of the garden devoted to the testing of new roses. More than sixty new roses have been sent to the garden from all parts of the world, and they are being tested under the scientific plan established by the Portland Rose Society.

During the year three other units of the garden have been completed and of these probably the most interesting—at least the most novel and spectacular—is the rose theater, which occupies a natural amphitheater of the garden. It is a true open-air theater, to accommodate about five thousand persons. The stage of the theater is about 350 feet long and 60 feet wide.

Another important feature of the garden, finished this year, was the section assigned to the Royal Rosarians. Each member is assigned a rose, and one of the pledges he takes on becoming a member is that he will see that the rose assigned to him is cultivated in his own garden.

The year 1922 has been notable in the rose world for the gifts received by Portland. In 1920 the new climbing rose, Bonnie Prince, produced by Thomas Newton Cook, of Boston, received the medal of the city of Portland for new climbing roses. When he, accompanied by Mrs. Cook, visited Portland in June, he made a formal tender of his right and interest in the new rose to the Portland Rose Society. Through an arrangement with the Bureau of Parks the initial stock of the new rose will be propagated, after which arrangements will be made for marketing the plants.

As the year closed Portland received another most generous rose gift, that of the new rose, Mrs. George C. Thomas, which is a twice-honored Gold Medal rose, having received in 1922 the Gold Medal of the American Rose Society and also the Gold Medal of the city of Portland.

The Portland Rose Society is making extensive plans for rose development during the coming year. Rose-culture will be introduced into the schools, and rose clubs, on the same lines as the pig and corn clubs of the schools, will be established.

An important feature will be the enlarging of the Rose Service Bureau. Through an arrangement with the growers, this Bureau inspects, before shipment, all plants sent to the members of the Society, and these plants must meet the standards as established by the board of local amateur experts.

A pleasant interchange occurred between Seattle and Portland at the Portland Show, June 20, 1922, concerning which a Seattle correspondent writes as follows:

The Portland officials accorded the Seattleites every courtesy, and were loud in praise of Seattle's blooms, which far outclassed any other collection exhibited. A specimen of the rose Mrs. J. H. Welch was easily the largest bloom in the show, and at the same time a perfect specimen. In addition to many splendid individual specimens, the box of twenty-four different varieties and the basket of twenty-five or more blooms were outstanding.

The vase of the rose, K. of K., attracted more attention than any other flower in the show. On all sides was heard the comment, "Where can we get this rose?" The committee was kept busy denying that the exhibit was staged by professional growers. It included seventy-five different varieties.

THE SEATTLE ROSE SHOW

From the letter of Mr. H. L. Collier, President of the Seattle Rose Society, the Editor has condensed—most regretfully—the story that follows:

At the appointed time, June 28 and 29, roses came in great quantities and of most excellent quality, with the additional wealth of the later perennial bloom, which greatly enhanced the beauty of the show.

The show was held in the Forestry Building, located on the campus of the University of Washington. The building, made from the native Douglas fir, is artistic and of ample proportions and well adapted for the exhibition.

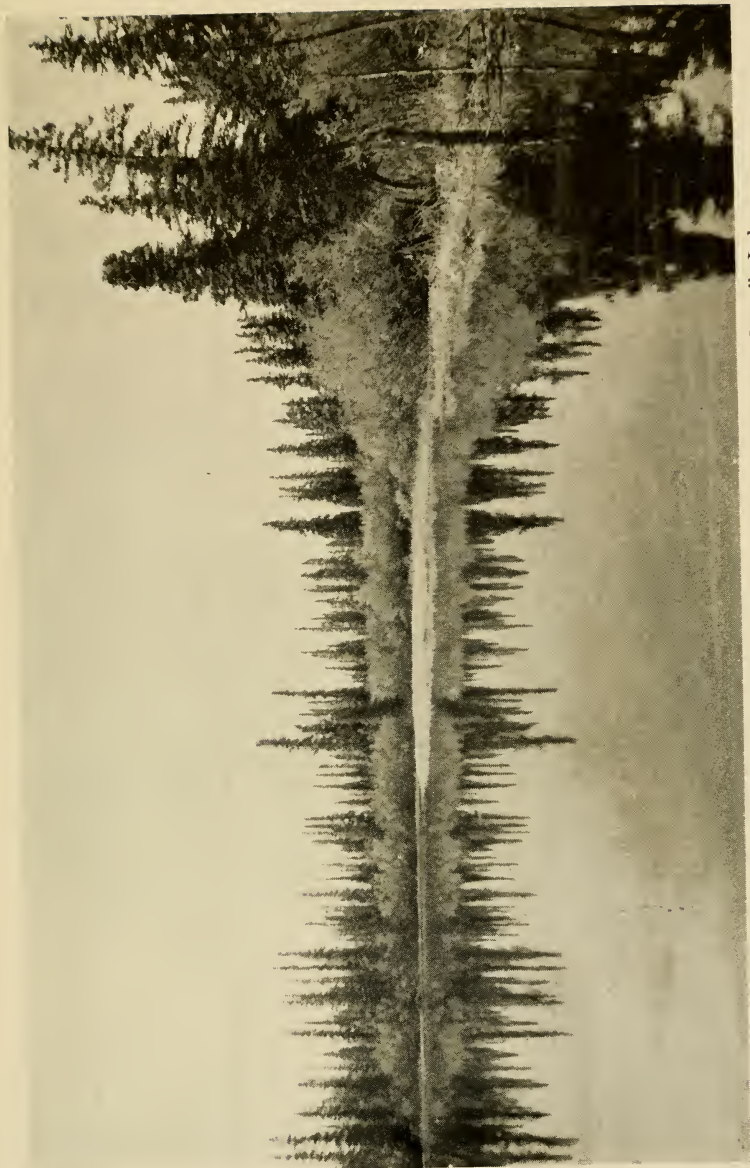


PLATE IX. Where grows *ROSA ACICULARIS*, on the shores of Noorvik Lake,
north of the Arctic Circle
(See "Roses North of the Arctic Circle," page 97.)

Roses came from every direction—La Conner, Monroe, Kent, Riverton, Kirkland, Alderwood Manor, Medina, East Seattle, Rolling Bay, and Tacoma.

There were 852 entries in the amateur rose classes, and a larger and much better showing of garden flowers than ever before exhibited by the Society. There were a number of box exhibits, as well as tables by amateurs.

In all, the schedule of entries provided for 53 classes, which were well filled, and a careful check of roses on exhibit showed 140 different varieties.

Roses were placed in glass vases upon black-covered tables, draped with black cloth, with plenty of space to show off the merits of each. Large containers, filled with native vine maple, huckleberry, and salal, were placed as a relief on the long tables, and the effect was much admired.

Many new roses were in evidence, for Seattle keeps up with rose progress. The attendance for the two days was fully 18,000, proving the interest in roses existing in Seattle and in the cities naturally tributary to it.

ROSES IN THE FINGER-LAKE REGION

The American Rose Society has notable tributaries in Syracuse, Auburn, and Rochester, and, in 1922, opportunity was taken to visit these communities. From a report written by the Editor the following extracts are made :

The President, the Vice-President, the acting Secretary, and the Editor foregathered at Syracuse, there to participate in the adjourned annual meeting amid delightful rose conditions and surroundings.

Thursday, June 15, was the first of three memorable days. It included a rose-fraternizing trip to Skaneateles, and the return to the exhibition of roses in the Y. M. C. A. of Syracuse, the holding of the adjourned annual meeting in the lovely gardens of Mrs. Hiscock, and an evening of rose-talk and rose-interchange with the large membership of the Syracuse Rose Society.

All this rose pleasantness surely came from and through the man who is the American Dean Hole, the man who certainly must have beautiful roses in his garden because he has beautiful roses in his heart—Dr. Edmund M. Mills.*

Then, on Friday, the pilgrims journeyed to Auburn, where the rose is almost official in its significance, because the secretary of the Chamber of Commerce is likewise the secretary of the Auburn Rose Society.

Seeing a beautiful rose-garden in the environments of the Auburn penitentiary was the least pleasant part of the day. The most notable feature was the garden of David M. Dunning, who for a half century has paid intelligent reverence to the beauty of the rose in a garden where all standards are set aside. To see a great plant of Frau Karl Druschki nine feet high in a cloud of white;† to see rarer and more difficult Hybrid Perpetuals in the fullest glory vying with Hybrid Teas in such beauty that few could recognize old friends, and to have the master of roses who did this tell how he did it, was an experience which alone made the pilgrimage worth while.

Then came the trip to the shores of Owasco Lake, where Charles J. Ferrin has in two years done more with a piece of swampy beach than ever Aladdin did with his genie. A tablet recites that on April 1, 1920, this was a muddy and

*The portrait shown on Plate II, facing page 9, is the first presentation it has been possible to make to the members of the American Rose Society of what Dr. Edmund M. Mills looks like. Preacher, teacher, writer, secretary, executive, rose president, champion swimmer, and, best of all, effective working Christian—this man among men, in his seventy-fifth year, is an outstanding American of the finest type.

†See Plate X, facing page 105.

forbidding bit of lake front. Our eyes showed us a lovely garden in which many hundreds of roses were in complete happiness doing their June best.

A more ideal exhibition room than that provided by the Chamber of Commerce in Auburn could hardly be imagined. Here, on two floors, were to be displayed the scores of entries from the rose-loving friends and members in Auburn on Saturday morning.

A convenient trolley landed the official party in Rochester, where the Rochester Rose Society was just opening, in the Convention Hall Annex, a show that made the visitors gasp in surprise and exclaim in pleasure. Not less than a thousand people were busily circulating around the tables covered with magnificent rose specimens. The president of the Rochester Rose Society, John Dunbar, a great plantsman, showed, with proper pride, the superb exhibit possible because of the rose resources of the Rochester park system.

A BALTIMORE ROSE SHOW

Under the auspices of the Home Garden Committee of the Women's Civic League, and primarily to encourage back-yard improvement, a premier rose show was held June 2, 1922. From the report written by Miss Mildred L. Murdoch, chairman of the committee doing the work, the following is condensed:

On June 2, 1922, the Home Garden Committee of the Women's Civic League of Baltimore, in coöperation with the *Evening Sun*, held its first rose show at 108 West Mulberry Street, the headquarters of the Women's Civic League. Long before noon the tables and every available space were filled with exhibits.

Nearly all the roses exhibited were grown in the back-yard gardens of Baltimore. The rules for exhibiting were as simple as possible, as many of the most interested gardeners are novices in exhibiting.

There were no entrance blanks except those published in the *Evening Sun*. Each person brought his flowers, tagged and named—if known! Tags were provided for those who failed to do this beforehand. The prizes were ribbons, supplied by the generosity of the *Evening Sun*.

The day following the show, the roses were sent to local hospitals to gladden the tedious hours of the patients, and grateful indeed were they, as proved by the letters received from these institutions.

Many were the interested people who came to the show, but there was no incident that gave more pleasure than the visit of Mr. Robert Pyle, the president of the American Rose Society. His kindly and gracious congratulations on the success of the first show will spur the committee on to hold each year, it is hoped, one more beautiful and successful.

The Home Garden Committee, by the way, was started in 1909 to promote gardening in the city of Baltimore. It financed itself each year by holding a Flower Market at Mt. Vernon Place, where flowers and garden tools were sold. This Committee had the distinction, as far as is known, of holding the first Flower Market in this country.

The work is now well organized, with a garden chairman in each ward of the city, working under the central Home Garden Committee. City-wide interest has grown in the past two years. This year there is a garden enrollment of approximately 2,000, a gain of 500 over last year.

THE DANVILLE CHILDREN'S ROSE FESTIVAL

Mention was made in the 1922 Annual of the way in which rose-growing among children had been stimulated in Richmond through the fine spirit of a local florist, John L. Ratcliffe. The same man has done a similar thing in Danville, and extracts follow from the report of the Rose Festival, as made in a letter to the Editor by Mrs. William D. Overbey, Chairman of the Public Planting Committee of the Danville Garden Club:

Two thousand Columbia, Radiance, and Red Radiance rose plants were distributed Friday afternoon, May 5, 1922, at the Memorial Mansion, among children from the public schools of Danville and Schoolfield, the latter a suburban mill settlement, in honor of the visit of Lady Nancy Astor to her old home. The affair, known as the Danville Rose Festival, was under the auspices of the Danville Garden Club. The entire two thousand rose plants were given by the Danville Flower Company. The coöperation of teachers in the public schools was enlisted by the members of the Garden Club, and cards entitling children to the roses were distributed by the teachers to the children first bringing in the coupons properly filled out.

When Lady Astor arrived, she passed through the grounds with her party over a pathway strewn with rose petals. She spoke to the children of flowers, inviting them to her own rose-garden in England. The rose bushes were then distributed among the children by the ladies of the Garden Club.

Besides a handsome silver loving cup, \$105 had been offered as prizes. The first two prizes were a savings account of \$25 given by Mr. Ratcliffe to the Danville child having the finest rose bush in October at the Fair, and \$25 in gold to the Schoolfield child scoring the same success, this being given by H. R. Fitzgerald, President of the Dan River and Riverside Cotton Mills. A second prize of \$15 and a third of \$10 in savings accounts were given by Mr. Ratcliffe, and two fourth prizes of \$5 in gold were given by Mrs. H. L. Boatwright and Mrs. Wm. D. Overbey, of the Danville Garden Club, while twenty \$1 savings accounts were given by the Commercial Bank.

A warm summer passed, a long drought came, but the children's roses were tended, and there was a wonderful display of fine rose bushes in the booth of the Danville Flower Co. at the Danville Fair in October. Three members of the Garden Club had been appointed a committee to judge the roses, and on the third day of the Fair we did our work. One Radiance bush had eight lovely pink roses, and for it we awarded the third prize of \$10 to a frail little fellow, a student in the open-air school.

A Columbia took the Schoolfield first prize, and a Red Radiance the other first prize. Both of these bushes had ten perfect buds in blossom, with splendid foliage and good stems. A few weeks later the remainder of the prizes were awarded in the auditorium of the Danville High School.

The Editor asks for accounts of rose happenings in 1923, for report in the Annual for 1924. Any special features that might be suggestive to other communities will be particularly welcomed. It is not necessary to mention ordinary awards.

The Yellow Climber, Emily Gray

AN EDITORIAL OBSERVATION

REALLY yellow climbing roses have been, north of the section where the Noisette roses are hardy, among the things that "ain't," in America. Gardenia and Aviateur Bleriot, Ghislaine de Feligonde and Goldfinch, and many others of equivalent promise, have bleached out in our brilliant sunshine, showing definite yellow only in bud.

But Emily Gray is different. The photograph making Plate XI shows the open rose and a hint of a bud, and these are definitely clear yellow, the mature flower becoming a pleasing ecru on the second day.

Then this rose has foliage so beautiful and individual that one would want it even if it did not bloom. It has a thick, waxy texture, and the young leaves are deep crimson.

Emily Gray came to Breeze Hill in the spring of 1921, and began to make herself at home quite promptly. Hints that she would shiver and die over winter proved baseless for the following mild winter, and to date (March 14) proved likewise unfounded after some severe nights and days of cold and wind, not below 10° above zero, however. The growth has been fine, and the blooms in 1922 were most delightful.

Through the kindness of our friend, Mr. Courtney Page, Hon. Secretary of the National Rose Society, the Editor was brought in correspondence contact with the originator of this notable rose, who writes as follows:

I am more than pleased to have your appreciation of the qualities of Emily Gray. However highly one may think of one's own production, one never knows how it will stand the test of time, or more especially how it will do under different climatic conditions. It is most gratifying to hear that it does well in America.

Emily Gray was the result of crossing Jersey Beauty with the pollen of Comtesse du Cayla.* I have quite a number of seedlings from that particular cross. Most of them were strong climbers, but quite a fair proportion of them were dwarf and perpetual-flowering. The foliage of all of them was good, but none had quite the robustness and individuality of Emily Gray. The colors ranged from deep golden yellow through all stages of yellow to creamy

*Comtesse du Cayla is a Hybrid China introduced by Guillot in 1902, described as having double flowers of nasturtium-red to orange-yellow. Jersey Beauty is an American (Manda) hybrid between *Rosa Wichuraiana* and *Perle des Jardins*, a vigorous yellow Tea rose.—EDITOR.



PLATE X. The Hybrid Perpetual, FRAU KARL DRUSCHKI, as growing in the garden of Mr. David M. Dunning, Auburn, N. Y. (See page 101.)

white; one was coppery salmon, but it was most disappointing in that the blooms were borne on short stems and the plant is not a vigorous climber, though it was very effective pegged down.

Most of my hybridization has been with *Wichuraiana* hybrids, and I have found *Jersey Beauty* a very good seed parent.

I have, unfortunately, not been able to devote much attention to my roses for the last few years. One of the results of the late war was that I had to leave my old home to take up recruiting work in Lancashire, and I have been kept in this neighborhood of Manchester on the work of our Ministry of Pensions ever since. This work is most exacting and leaves me little leisure for my own private pursuits, and the climate of this part of England is not suitable for open-air seed-raising.

All my cross-fertilization has been done in the open. The stamens are removed whilst the flower is in bud, the pistil examined with powerful lens for any trace of auto-fertilization; then after the cross has been made, the flower is wrapped in a twist of waxed tissue paper to prevent further fertilization. The seeds are raised under glass, and as soon as the seedlings are a few inches high they are planted out in the open. The robust survive and the weaklings do not. This is somewhat drastic treatment, but at any rate it assures me that any of my seedlings that come to maturity are of sound constitution.

I still have a number of interesting seedlings in my old garden in the south, but I cannot seriously test their value until I can devote more time to them.

Yours faithfully,

A. H. WILLIAMS.

The National Rose-Test Garden

By F. L. MULFORD, Horticulturist, Department of Agriculture

EDITOR'S NOTE.—On page 122 of the 1922 Annual Mr. Mulford set forth the plan for making of the National Rose-Test Garden at Arlington, near Washington, a place to exhaustively study the important matter of stocks for rose budding, and to carry on a duplicate test at Bell Experiment Station, about twenty miles north. The report here presented tells of the progress made and of the yet-continuing variety tests.

Much of value ought to develop as these tests of the various stocks now in commerce, and those deemed likely to be suitable, are completed. The tests started last year included *Manetti*, *Dog rose* or *Brier*, *Mme. Plantier*, *Seven Sisters*, *Wax rose*, *Ragged Robin*, *Rosa cinnamomea*, *R. setigera*, *R. rugosa*, *R. multiflora Cathayensis*, *R. Soulieana*, *R. multiflora polyantha*, and several hybrids produced by the late Dr. Van Fleet.

PROGRESS is being made on both the rose-stock tests and in the work of the National Rose-Test Garden.

On the stock work at Bell Station sufficient scions and stocks are now available to permit of the budding of the plants necessary for the tests.

A mother plant (that is, a single specimen) of each of sixteen varieties was selected, and from these other plants have been

propagated, so that now there is enough wood to permit of the budding of 800 plants of each variety. Thus all the bud wood of each variety of scions will trace back to a single plant selected in 1921.

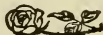
In like manner, mother plants of the kinds of stocks not in commercial use have been selected, and plants have been propagated from these, some kinds by seeds, other kinds by cuttings, as has seemed most desirable. The kinds of roses that are already in commercial use as stocks are being prepared in the usual commercial manner.

Fifteen stocks have been selected for trial, including the more common ones now in use as well as new ones that appear to have characters that go to make up a satisfactory rose stock. Of the sixteen varieties of Hybrid Tea roses of which there is now sufficient suitable wood, probably ten will be used for the tests. It is expected to bud the material which is ready during the coming summer.

In the Arlington Test-Garden, observations on the behavior of climbing roses has continued as heretofore. The rose species moved from the Test-Garden are becoming well established in their new location. Forty more species have been added.

Manetti, Multiflora japonica, and Odorata rose stocks are ready for grafting to those varieties of which there is enough bud wood available from a single mother plant. Also there were a number of plants grown from cuttings in the effort to have some varieties ready, as a test will consist of plants on their own roots and on each of the three stocks mentioned above.

Many photographic and color records were made during the year of all types of roses. Thirty new varieties were added to the collection in the garden.



Carloads of Rose Plants.—That the rose is beginning to be more in the public eye is shown by the newspaper clippings relating to it. The *Los Angeles Express* of January 16 prints a statement from the general freight agent of the Southern Pacific Railway announcing the arrival in New Jersey of five carloads of rose plants shipped from Los Angeles to a point near Philadelphia. The shipment went through in a little more than twelve days, and an attendant accompanied it, taking care of necessary ventilation; there was heating arrangement to preserve the plants should the cars encounter cold weather.

The Rose Cut-Flower Situation

By S. S. PENNOCK

Past President of the American Rose Society, Philadelphia, Pa.

EDITOR'S NOTE.—No one is better able to set forth the actual situation in the cut-flower rose world than Mr. Pennock, whose large wholesale establishments in New York, Philadelphia, Baltimore, and Washington give him contact with a wide range of growers, retailers, and consumers. He is himself an ardent rose-lover, and thoroughly acquainted with the rose in the garden as well as in the greenhouse. For that reason his suggestion that cut-flower salesmen acquaint themselves with rose facts is the more important. Will they do it? One very successful florist has found it quite profitable to be able to tell about and to sell rose plants to his rose customers.

EACH year we of the cut-rose end of the flower business see an improvement in the varieties that are grown, and this year shows much advance in the quality of roses handled commercially. Probably the variety that has produced the most comment, and really is making a sensation in some sections, is the new clear yellow rose, *Souvenir de Claudius Pernet*, one of M. Pernet-Ducher's seedlings. It was awarded the French Gold Medal in 1920, after a two-years' trial in the Bagatelle Gardens. While it was considered a valuable acquisition as a garden rose, it was generally thought by most rose men that it would not force well, but this supposition has proved erroneous since it has been tried out thoroughly by several of our more progressive growers. Then, too, some claim that it is a failure as a garden rose in America, but I do not think that it has been sufficiently tested as yet. As I saw it in Europe, in 1921, it was wonderful. It attracted universal attention in the Bagatelle Gardens, not only from those who knew roses, but from the public in general. It has good-sized flowers of beautiful color, borne on good stems, but very thorny.

Souvenir de Georges Pernet, another one of M. Pernet-Ducher's seedlings, was introduced a year later than the rose mentioned above, and captured the French Gold Medal at Bagatelle in 1921. It is a very good pink, much the shade of *Columbia*, probably a little darker, with a fine large bud, larger, I think, than either *Columbia* or *Premier*, and altogether, a promising rose. There are but a few plants available in this country, but I hope that it becomes a good forcing rose.

Two splendid roses are E. Gurney Hill's America and Montgomery's Commonwealth, and I feel sure they will fit in well—one probably better in one locality and the other in another locality. It is generally thought that Commonwealth will take the place of Mrs. Charles E. Russell.

It is a matter of great regret that Russell will soon be a rose of the past, particularly to those who have been handling it as a shipping rose. No variety on the market today will stand shipping as well and give the results that Russell did. There are exceptions, of course; for instance, in the fall of 1921, I sent a few roses over to England by one of my friends—American Beauty, Russell, Premier, and Columbia, as to variety. I thought the Russells would keep the best of all these roses, but, surprising to say, Premier was the only one that arrived in any kind of presentable shape. Usually our experience with Russell has been that it will outlast any other rose for shipping long distances and give good results after it reaches its destination.

Annie Laurie is one of this year's roses and looks very promising from an exhibition standpoint. It has not been tried out in the East but is well spoken of by those who know it. It is a lighter shade of pink than either Columbia or Commonwealth.

As yet we have not had a red rose that has been ideal from a forcing standpoint. Hadley, with its wonderful color and quality, is considered ideal by the buyer, but not by the grower, and is therefore not as popular as it otherwise would be. Because of its being a shy bloomer and hard to grow, it is placed among the aristocrats of the rose realm.

Crusader, which was expected to supersede Hadley, as it is more easily grown, has not proved satisfactory. It has not the high quality of Hadley nor is it nearly so good a keeper, although a large, full flower. It is grown rather more in the West than it is in the East, which is also the case with Milady.

Milady, as stated above, is very little seen in the East. Whether our growers here do not know how to grow this rose, or whether the West provides more favorable conditions, is hard to say, but I do know that our eastern people do not grow it nearly so well as the western growers. It is not an ideal red rose, but, at the same time, it "fills the bill" for very many.

Legion is a rose that has improved the past year, and it is

going to be grown rather more extensively the coming season. The growers are finding out how to grow it, and, accordingly, it is showing better results. While not an ideal red, and not to be compared with Hadley, Legion is, nevertheless, meeting the need for a cheaper red rose because it is a very free bloomer; in fact, it is one of the freest bloomers that is being forced today. In some sections Legion is not being grown at all. We were visited by a prominent rose-grower this past winter who did not even know what it was.

Francis Scott Key is a great rose, and probably brings as high a price as any variety on the market, excepting American Beauty. It is not a midwinter rose, but rather a warm-weather sort, and, grown as such, has its place; particularly fine in the summer-time when other roses are poor. The flowers are very double, borne on good, long stems, and have wonderful lasting qualities. It is regrettable that it is not more largely grown.

Pilgrim is another rose that is not appreciated as much as it deserves by the growers, retailers, or the public. It is still considered by some as one of the best roses on the market, particularly in the winter-time. At this writing (the middle of February) we consider it one of our most valuable roses; it lasts well, is a beautiful shade of pink, has good stiff stems, and fine foliage. The indications are that it will be planted rather more heavily this coming season.

Premier and Columbia are much more extensively grown than any of the other cut-roses, being very popular. Some growers claim that Columbia comes poorly in the winter, but this is counterbalanced by Premier which is at its best then. There are more Premiers grown around Chicago than in the East. Each of these roses has its place.

Mrs. Warren G. Harding, a sport of Columbia, is a popular rose but as yet is not grown very extensively. It comes more perfect in shape in the winter-time than Columbia, is a much darker, richer shade of pink, and has a rather longer bud.

American Beauty, the grand old standby we have had for so many years, will probably be planted a trifle more heavily next season. It is only grown by a few who make a specialty of it. In order to make a success with American Beauty one must have it in quantity, and there are certain buyers who

always insist upon having Beauties when they want to get something particularly fine in the rose line. They know what that rose is and know what it means, particularly when sent as a gift. It is quite a satisfaction to know that while American Beauty is an old rose it is still going to be grown. It has been practically dropped in the West, though we understand that some growers are going to take it up again.

Richmond is still grown by a few of its old growers, who mostly crop it for certain periods, particularly Christmas.

Today the only white rose that is grown in quantity is the old standby, Double White Killarney, and it is still a very fine and profitable sort to grow, although a white variety is not as much called for as some other colors. Angelus is giving promise of being a very satisfactory rose in many localities, but it is in a rather different class than Double White Killarney. However, there is room for both roses. The flowers are a very pleasing color and shape, with good stems, and it is a fine bloomer. Possibly the southern growers will find this a rose that would do very well with them, as it is more double than Double White Killarney, and has good lasting qualities. It would be a particularly good sort where it is grown for home consumption, as the blooms could stay on the plants longer than Double White Killarney. It certainly has its place and is a good addition to the white list.

Mrs. Aaron Ward is only grown to a limited extent but is still popular; a most delightful little rose. It is not only valuable as a cut-flower, but is an excellent garden variety. I think that I get more pleasure out of this rose than any other that I have in my garden. It blooms almost continuously from June to frost.

Butterfly is extensively grown, but not quite so much as it was several years ago. It looks, however, as if it will be planted a little heavier the coming season.

Ophelia is not so largely grown, excepting by those who have specialized in Ophelia and have not yet taken up Butterfly.

Golden Ophelia, a valuable rose, is as yet not extensively grown. It is, where known, very popular, being a little different in color from any rose we have, and also moderate in price. It will probably be planted more heavily this year.

Citronelle is a very pleasing rose, and I am sorry more

growers have not taken it up. It does not seem to meet with favor from a grower's standpoint.

Sunburst has been almost dropped, although, this season, it is being grown in larger quantity. Whether the new rose *Souvenir de Claudius Pernet* will interfere with the popularity of Sunburst or not is hard to say. Personally, I think that each is entirely different in shade of yellow and also in character, so let us hope that Sunburst will not be crowded out by the newer rose, as it is one of our most valuable varieties. More of a variety is always an advantage. We do not want to see the rose men drift back to the condition that existed a few years ago, when everybody had Killarney, and practically nothing but Killarney—white, pink, and the variations of pink. That condition was not healthy for the business; neither was it healthy for the growers. It is much better to have a number of varieties, giving the public a better opportunity to buy. A large variety of choice impresses them more, without a doubt, and they will be more apt to buy.

Frank W. Dunlop is still used considerably by certain growers, but with those who like *Columbia* and *Premier* it has been somewhat of a disappointment. We understand that our Canadian friends are yet growing it well. It certainly is a wonderful rose for size, quality, and stem. In some exhibitions, I have seen nothing to equal it, and it seems unfortunate that more of our rose-growers are not growing it.

The little "debutante" roses are not grown quite as extensively as they were a few years ago. Whether these are not as popular, or whether the more recent introductions of Hybrid Teas, which give so much better value, have hurt the sale of the small roses, is a question. There is yet a limited sale for them, but very few are grown, with the exception of *Cécile Brunner*.

Several of the rose men who import have recently brought over a number of new roses, and we may look for some valuable additions, not only among these importations, but from our own hybridizers as well. Some really good things are in sight and among these we may have, not only some good forcing roses, but some choice garden varieties. I think every grower should watch these new introductions and "keep tabs" on them, particularly as the rose end of the flower business is pushing

ahead more rapidly than any other branch, and by having more variety of better and more interesting roses we will help the business along just that much faster.

I wish that more of those that are handling roses, particularly the retailers, were able to give their customers more detailed information as to the history, habits, and the like, of the different roses that they handle. This would be a great help to the business, particularly in advising customers as to the best roses to grow in the garden. Some of the forcing roses, and plants that have been forced in the greenhouse, make splendid garden roses, while others are of no use at all for that purpose. I think many of our retailers fail to realize that it would elevate the business to a higher level if they gave their customers more detailed information, with suggestions as to variety and care. A very excellent way to get rose knowledge, real instruction that will be worth while, is to read carefully the American Rose Annual, and pass this knowledge on to the rose-buying and rose-loving public.

The attendants in the retail flower stores should not only be able to tell about the history of the roses they may be offering to a customer, but something about the men who make these roses. For example, Columbia will mean more to the average purchaser if the salesman can tell a little of the work of our splendid rose producer, E. Gurney Hill. To tell a customer why Souvenir de Claudius Pernet was so named will add interest in selling that rose.

Then, when the garden inquiry is made, the flower salesman should be able to suggest the right roses, and he should tell the truth about them. It is foolish to promise plants—and the florist ought to be ready to sell plants—that will give a customer as big roses as those being sold, but he can always, if he really knows the business, tell how to have good roses at home. That will help and not hurt the cut-flower business.

Cut-flower salesmen have an unusual opportunity to help the business, help themselves, and help the customer in recommending, to those seeming interested, membership in the American Rose Society. With the current Annual at hand, it ought to be easy to send to the Society's office many new and worth-while members.

“What Is the Name of That Rose?”

AN EDITORIAL DISCUSSION ON LABELS

WHETHER you ask the question, or your friend, it deserves an answer. Perhaps the nameless rose is as lovely and as sweet, but it is not as satisfying, any more than it is satisfying to be ignorant of the name of a human friend. Names do count materially.

There are those who, without labels, are sure of the names of their roses, and are never at fault when asked. At least they seem to be sure, but the fact that the name surely given at one time is not always identical with the one given just as surely to the same rose on another occasion implies a certain inaccuracy. Such dogmatic and unconfirmed statements remind me of the cutting rejoinder I once heard made by his employer to a young man who was volubly asserting something, but certainly floundering in his story: “Mr. Jones,” slowly said the inquisitor, “the extent of your misinformation is remarkable!”

A rose deserves to be known by its true name, and the loving owner of a good rose likes to be certain of some other facts concerning it. From whom he purchased the plant, and when it was planted, are both items desirable to definitely know. There are two ways to be sure this information is available, aside from memory dependence.

Every planting of roses or other plants ought to be recorded on a diagram or plot of the garden. It is easy to arrange such a record, especially if the garden-worker can get some writing paper ruled with squares, or at right angles, or will take the trouble himself to prepare such paper. The lines one-fourth or one-half inch apart will serve to easily outline a home map, at the rate of a foot of ground for each square. A half-hour with a yardstick or a tape-line will provide the data to sketch in all the dimensions and permanent features.

Then the rose-beds can be located—and with north and south indications also—and the placing of a number for each plant, referring to a list to which the numbers are a key, will

make it possible to name any plant, even if the label is lost or destroyed.

But for general daily comfort, the label at the plant is essential. To have it legible, convenient, and reasonably permanent without too much expense is not easy.

As received from the nursery, the plants will usually have one label to each sort, not to each plant. This label, ordinarily a small wooden one, printed or written, will be attached to one twig by its double wires, tightly twisted to the twig. If left as it comes on that twig, the chances are that it will cut through the twig as the latter swells in growth. It ought, therefore, always to be untwisted, and, if used at all, have its wires looped about a main twig, with ample room left for growth.

This nursery label is seldom at all permanent in character and ought not to be depended upon. One progressive grower provides each plant with a very neat and distinctive printed celluloid label, attached by a brass wire, and this has elements of durability, but, like all labels attached to the plant, it is certain to be pruned away sometime.

Where for any reason labels must be attached to the plant, it is wise to make them somewhat enduring. Any of the forms described below can be used, and if brass or copper wire no lighter than No. 20 is taken for securing by a large loop to a crotch or other place on the plant where the label will not slip down or blow off, there is reasonable service in sight.

By far the better plan is to have the rose label independent of the plant. Such labels are of many sorts and many costs. I present only the less expensive kinds, for there is seldom any bother about finding how to do anything if one is willing to spend without stint.

Let me suggest that it is wise to have always at hand—I carry them in my garden basket—several sizes and kinds of the ordinary wooden labels, for temporary use. They are cheap, and one ought always have the 3½-inch wired “tree label,” and garden labels to “stick in” of 6-, 8-, and 10-inch sizes.

A very desirable label is one easily visible from walking height, and yet so close to the ground as to be inconspicuous. I have for more than a decade made use of such a label, here

illustrated as Fig. 1. It provides two faces of zinc, each 1 by $2\frac{1}{2}$ inches (or any other desired dimension), exposed to view at the ground surface at an angle of 45 degrees. On these zinc faces, rubbed clean and bright with fine emery cloth just before using, the name and other details are written with a clean steel, or preferably gold pen, dipped in a solution of 10 grains platinum chloride to 4 ounces of water. (These 4 ounces will provide "ink" for 20 years!) The writing immediately turns black, because there has resulted a deposit of metallic platinum on the zinc. This is permanent; in fact, it is necessary to work long with an abrasive like emery cloth to get off any of the writing. The label will get dirty, of course, but can easily be cleaned with water any time. The only damage that has ever happened to any of these zinc labels at Breeze Hill is from concentrated spray material—lime-sulphur will act on the whole zinc surface injuriously. Wherefore, when that necessary but nasty substance is being squirted about, the zinc labels are given a paper protection.

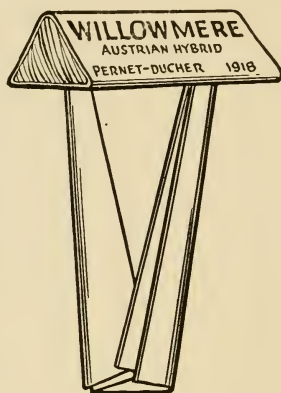


Fig. 1. A permanent zinc label.

This ground-level label is formed from a rectangular piece of zinc $2\frac{1}{2}$ by 12 inches for a ground-penetrating stem of 4 inches. The zinc is cut where indicated, and folded over an angular wood core, which, as I have used the plan (and it is of my own design, I may say), is of cypress, and is heavily coated with white-lead. (See Fig. 2, page 116.)

These comparatively cheap and entirely permanent labels I use for the hardy climbing roses, as well as for shrubs and trees. They are not suitable for beds, because cultivation too easily moves them.

There are obtainable various expensive cast-iron markers to thrust in the ground. I do not discuss these.

By far the best label for roses in beds is one suspended from the top of a slender metal support which will not interfere with cultivation. One easy form of such a label is shown by

Fig. 3. It is twisted *iron*—not steel—fence wire, heavily galvanized, cut $2\frac{1}{2}$ feet long below an “eye” or ring formed on one end. From this eye the actual label hangs, preferably by a copper or brass wire. These rods are pushed about one foot into the ground, close to the plant they are to mark, leaving about 18 inches above the ground.

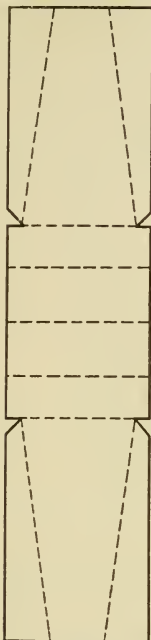


Fig. 2.
Zinc strip for folding
label shown in Fig. 1.

Any form of label may be wired to the eye of this rod. The simplest, and one that will be legible for about three years, is an ordinary $3\frac{1}{2}$ -inch or larger wooden tree-label, rubbed all over with white-lead just before writing the name upon it with a soft lead pencil. These labels must, of course, be copper-wired to be lasting.

There is in commerce at about a cent each a label of thin sheet copper, $3\frac{1}{2}$ by $\frac{3}{4}$ inches, with a copper eyelet through which copper wire serves to attach it to any support. This label is used by writing into it with a stylus—a heavy wire nail does well—the label resting on several blotters or a folded newspaper. The name can thus be deeply impressed into the copper. I have found the legibility of this label much improved by filling the writing or



Fig. 3.
Label for
roses in
beds.

letters with thick white-lead. A little determination to deeply impress the letters of the name in the copper, and a little care in filling and wiping will produce good results, easily legible as one walks by. (Fig. 3.)

Better yet—and available commercially, I think—are the labels produced in a machine which deeply embosses the letters in a strip of zinc or aluminum, such as shown in Fig. 4. Suspended by a copper wire from the support mentioned or its equivalent, or hung anywhere about the plant where it can be easily found, this is a permanent and legible

label. Its main defect is that there is no place to put on the origin of the plant or to date it.

I use also a zinc strip label, 7 by 1 inches, and tapering to a quarter-inch, on which the name and details are written in platinum as before noted. (See Fig. 5.) The narrow end of this label is curled around a branch of the plant it marks. It is permanent, but sometimes gets pulled off. The wire hanging is better.

• DEAN HOLE •

Fig. 4.
An embossed label



Fig. 5.
Zinc strip
label.

Now let me again reiterate that there are labels many, and that it is less a question of *what* label than of *a* label. There are excellent celluloid covered markers; there are painted stakes to be driven in; there are iron rods to be used where I have mentioned twisted wire; there are sumptuous cast labels with the name in raised iron. Any permanent, legible, convenient label is right, unless it is so conspicuous as to be disagreeable. I have detailed only a few that are inexpensive and that have kept my roses marked. Any label is a good label that plainly marks the plant all the time and that is plainly visible without being obtrusive.

Going back to the garden diagram, let me suggest a convenient loose-leaf binder or "ring book," provided with sheets in square or "quadrille" ruling, on which the diagrams may be made and notes preserved. (I find a weekly bloom-record a most desirable thing as the garden years pass.) A good memory is a precious thing; why burden it with details that might better be committed to paper and later be of much use to someone else?



Successful Nail-keg Rose Protection.—J. R. Dickson, of Columbus, Ohio, reports on the complete success of a method of protecting tender roses by placing over them sawed apart nail-kegs after the ground was frozen, and then filling in around them with earth, the bushes having been bundled up.

Mr. Dickson's letter states: "Today (March 10) I lifted them and found the wood in fine condition as far up as they were protected. . . . This was not a severe winter, but we had a great deal of sunshine with freezing and thawing to contend with, and very little snow. I am well pleased with this mode of protection and will use it again." The nail-kegs were sawed in two in the center, giving a 9-inch portion to surround the plants.

Roses in Australia

By E. H. WILSON

Assistant Director Arnold Arboretum, Jamaica Plain, Mass.

EDITOR'S NOTE.—We have had much direct news of roses from Australia, but heretofore only from the Australian standpoint. Mr. Wilson, undoubtedly the foremost plant collector of his time, and a great botanist as well, has previously given us the rose news of western China, and indeed is responsible directly for the introduction into America of many superb Chinese native roses. He now reports on the roses below the Equator, as observed in a collecting trip from which he returned in 1922.

AUSTRALIA and the United States are almost exactly of the same size, but the climate of Australia is much the warmer since a very considerable part of the country is within the Tropics. Also, it is essentially a land of sunshine and in general aspects very similar to California. The more southern parts of Australia enjoy an excellent climate; in other parts the rainfall is irregular, and droughts, often of a serious nature, are unfortunately not infrequent. The cooler parts of the Austral Continent are ideal for the roses we term "tender," and the Australian people are not one whit behind their kindred of the north in their love and appreciation of the Queen of Flowers. In Australia roses are grown solely out of doors for decorative purposes, either in beds, as hedges, on pergolas or rambling on houses and buildings. The huge glass structures—"rose factories"—so familiar in this country are unknown there.

On my arrival in Western Australia in October, 1920, I was at once attracted by the flower-gardens, a prominent feature around nearly every homestead. Sentiment or the "homing instinct" is obvious in these gardens, for it is the favorite flowers of the northern Motherland that are given pride of place, and the rose is everywhere a dominant note. As I write, a home in the small country town of Toodjay, in Western Australia, covered with Banksia roses, yellow and white, Fortune's Yellow, and Cloth of Gold, all laden with myriads of fragrant blossoms, comes vividly to mind. I spent one day, the guest of the leading lumber company of Western Australia, in their cottage at Jarradale, and on the tables were several bowls filled with magnificent blooms of Hybrid Teas. Among them were

Maman Cochet and Mme. Abel Chatenay, and finer flowers of these roses I have never seen. Roses that were favorites in the days of my boyhood delighted me on many occasions during my travels in Australia. I have mentioned some, and to these may add Safrano, Lamarque, Isabella Sprunt, Reve d'Or, Niphetos, Beauty of Glazenwood, Climbing Devonensis, Gloire de Dijon, William Allen Richardson, Perle des Jardins, and Maréchal Niel.

The Banksia rose flourishes there as on its native heath. In Western Australia I noted the Boursault rose naturalized around Toodjay, and throughout southeastern Australia the Sweetbriar (*Rosa eglanteria*) has become a pest. Some of us, while fully appreciating novelties, have a strong leaning toward old favorites, and to see these happy and thoroughly at home rejoices the heart.

But do not let this mention of old familiar friends prejudice the reader into the belief that Australian gardens lack the newer and most modern roses. On the contrary, Australian rosarians are as up to date as their ilk elsewhere, and rose novelties as they appear are eagerly sought after. The new roses produced in this country and in Europe are acquired at the earliest opportunity, and tested and appraised at their value for Australian gardens. In a garden near the city of Adelaide I saw the Los Angeles rose thriving splendidly, and near Sydney the Hadley and Radiance roses were a joy to behold. Rose-breeders are also at work "down under," and a number of kinds of peculiar value to Australian gardens have been produced. I believe that they will do for the rose what their fellow-countryman, Thomas W. Pockett, has done for the chrysanthemum. It was my good fortune to visit Mr. Alister Clark's garden at Bulla, not far from Melbourne, and I was immensely impressed with the work this gentleman has done and is doing. He has used *R. gigantea*, and certain garden roses of hybrid origin, with excellent results and has raised a number of roses of preëminent value for Australian gardens. It was late in the season, but his Climbing Black Boy, Flying Colors, Scorcher, and Golden Vision, and the bushy Don José, Australian Felix, Sunny South, and Fancy Free merited high praise, not only for their vivid blossoms but also for their lustrous, mildew-free leaves. From second

crosses of these with *R. gigantea* seedlings he is now getting perpetual-flowering dwarfs, also with mildew-proof foliage.

Mildew and black-spot are, unfortunately, prevalent in many parts of Australia, and so, too, is a more dread disease known as "die-back." The Pernetiana roses are especially prone to these diseases, and except in a few favored localities are a failure in Australia. Hybrid Perpetuals are not a success and are fast disappearing from Australian gardens, though I saw good examples of Hugh Dickson, Mrs. John Laing, Frau Karl Druschki, and Duke of Edinburgh. Of rambler roses the Multifloras suffer badly from mildew, and to a lesser degree so also do the Wichuraiana and other hybrids. Nevertheless, such as Tausendschön, Mrs. F. W. Flight, Dorothy Perkins, Excelsa, American Pillar, Shower of Gold, and Silver Moon are general favorites, and in normal seasons remain fairly mildew-free. All the Noisette roses flourish amazingly and, among the bedding Polyanthas, Orleans, Maman Turbat, Cécile Brunner, and Rödhätte are freely used and give full returns.

Of species of *Rosa* I saw few in Australia, and only those native to the warmer regions of the north thrive. The Cherokee rose (*R. lævigata*) and its garden forms, and the Macartney rose (*R. bracteata*) are general favorites for hedges and covering fences. The Banksian rose (*R. Banksiæ*) has been commented upon, and the prototype of the Tea rose (*R. gigantea*) has found itself in Australia, where it flowers freely. The yellow *R. Hugonis* is very fleeting, and *R. rugosa* and its forms and hybrids are virtually worthless in the Austral Continent.

The Teas and Hybrid Teas are the roses par excellence in Australia and, indeed, are the roses for that country. In no other land outdoors could they possibly thrive better. Nearly every sort raised succeeds there, and among the leading favorites not already mentioned are Hoosier Beauty, K. of K., Hawlmark Crimson, Killarney and Ophelia with their sports, Mrs. George Shawyer, Columbia, Red-Letter Day, White Maman Cochet, Mrs. W. J. Grant, General MacArthur, George Dickson, and Lady Hillingdon. The fragrant Gruss an Teplitz is as fine and as free in Australia as in the northern lands; and in New South Wales, if many rose-lovers were restricted to one sort, they would vote for Mme. Abel Chatenay.



PLATE XI. The Wichuraiana Climber, EMILY GRAY, with clear yellow flowers, as blooming in the Editor's Garden. (See page 104.)

Roses in the Philippines

By MRS. PAZ L. BAUTISTA, Manila, P. I.

EDITOR'S NOTE.—The fertile tropical islands that came into the United States family as a consequence of Dewey's activities of nearly a quarter-century ago are so close to the Equator that roses, belonging generally to the Temperate Zones, cannot be expected to flourish there. Yet a hint reached the Editor more than a year ago that love and persistence had prevailed, and that there were roses in the Philippines, wherefore effort was instituted to get the rose news.

Mrs. Bautista, whose interesting details of rose-growing in these islands follow, is a practicing attorney in Manila. She is well acquainted with the varied climatic and propagating conditions, as will appear.

THE rose must always be an exotic in tropical countries. The excessive and long-continued heat during the dry season and the excessive humidity and rainfall during the wet season conspire to afflict the rose-grower. Generally speaking, imported varieties grow in the Philippines only through incessant and painstaking care which, fortunately, many have the patience to give. Of course, there are a few varieties which have become so thoroughly acclimated that they may be called, and are generally considered to be, "native." Among these "native" varieties I include all roses which are not of recent importation, and those which grow in the open with the least amount of care. These roses are very hardy (I should like to say in explanation that when I say hardy, I have in mind *heat*-resisting qualities), and are found in the average rose-garden and in the Singalong gardens in Manila. They bloom all the year around, and are very fragrant.

The Alexandria is the best and most hardy of the Philippine varieties. It grows very fast, and the large flowers, which bloom in stiff clusters, are carried on long, stout, straight canes. The blooms, which are not very full, are a deep rose color and intensely fragrant. This rose is the most generally cultivated in the Philippines, being found even in the remotest country places, where it thrives under adverse conditions.

The Rosa de Castilla is a very hardy rose, with small leaves and flowers and a bushy habit of growth. The blooms are pink, with streaks of a deeper shade and petals that curl under, lengthwise, like some dahlias.

The Pitinimi are tiny roses. The white variety blooms in clusters, while the pink variety, which is not perfect in shape, blooms singly.

Then there is Jérico, a white rose with pale rose tints; Alfonso XII, a light pink rose, very popular for cut-flowers; and Escarlata, double and single, a deep red rose which is too perishable to be of much use when cut.

Of the more delicate varieties the most popular are La France, known everywhere in the Philippines as Conde de Paris, and three varieties simply named Tea Rose (*Rosa de Tê*), Rosa Amarilla (Yellow Rose), and Elena Gold (Helen Gould).

In places located on great elevations, roses of all kinds thrive most wonderfully. In the Philippines, the best place for roses is Baguio, the summer city of the Islands, about 5,000 feet above sea-level. It is safe to say that any rose which grows in temperate climates will thrive and bloom in Baguio. It is, however, a singular fact that rose bushes brought down to the lowlands from Baguio have a smaller chance of surviving and blooming than roses imported from temperate countries.

In Baguio the most common rose is Maréchal Niel, which is very slow to bloom in the warmer sections of the country, while in Baguio it covers the summer cottages, smothers the arbors and arches, and may even be seen blooming by the roadsides in spite of neglect and dust.

Then there is a variety popularly called American Beauty, but which is not the true American Beauty, for it is deep pink in color. This rose is very large and double, and is popular.

Lucban, a mountain town in southern Luzon, on an elevation of about 2,000 feet, is also famous for its roses.

In Manila and other lowland towns, roses thrive quite well if given constant care and attention. The kinds suitable for use here are the Teas, Hybrid Teas, and some Rugosas.

With us, roses, especially the more delicate varieties, do best in large pots elevated by means of stones to protect them from ants. If an *azotea* or an uncovered porch is available, so much the better. The roses should be in a place where they can get sun from early morning till about 10 or 11 o'clock.

The fertilizers that I use are cheap but very effective. I soak coagulated ox-blood overnight in a kerosene-can full of

water. This is used for watering twice a week. None of the solid particles are used, as they attract ants. Two glassfuls of the liquid are sufficient for a good-sized rose. When the can is empty, more water is added to the blood, until there is very little of the blood left. Then another fertilizer is used. This is lumbang cake, or palliat, the residue from the lumbang nut after the oil has been extracted for commercial purposes. This cake is soaked in a kerosene-can full of water and the same procedure observed as in the case of the ox-blood.

A third fertilizer comes from the kitchen and may be used occasionally when available. This is water in which fish has been cleaned. We strain and use the liquid for fertilizer.

For killing the white worm that eats the roots of roses, I use powdered tobacco, which is sprinkled on the surface of the soil. For the other insects that feed on the leaves and buds I use the spray, and at night a smudge of tobacco stalks and leaves.

For propagation, cuttings are chosen from the old stems, so that when I set them out I also prune the bush. There should be three or four leaves on the cutting. If possible, I cover each cutting with a glass or wide-mouthed bottle which I don't remove until the growth is well under way, and I keep it under a tree where it will be partly shaded.

A quicker method is by what we call "rooting." I select an old stem and scrape half an inch of the bark around the stem below the joint. I then get two stout leaves from a rubber tree, cacao tree, or any other tree with thick leaves, and shape these leaves into a cone around the scraped stem, with the wide end turned up. I then secure the cone by means of a toothpick. Then I take a long, stout stick, and plant it firmly in the earth, securely tying the stem to it. The idea is to prevent the stem from moving, as rooting is delayed by the slightest motion. I fill the cone with sufficient earth to cover all the scraped portion. Rooting takes from twenty to thirty days.

Although the rose will always be an exotic in the Philippines, still there is no reason why it should not be made to thrive and bloom. The main trouble that the Filipino rose-grower experiences comes from the fact that the imported plants arrive in a wretched condition, due to the exceedingly careless ways of packing used by some American growers.

The Secretary's European Rose Visits

By JOHN C. WISTER, Secretary American Rose Society

EDITOR'S NOTE.—The American Rose Society has been fortunate in having another of its executive officers visit the rose centers of Europe in 1922. Mr. Wister's experiences at the great flower shows are of interest, but his intimate account of the great French gardens and nurseries is even more so.

Through the courtesy of the Editor of *House & Garden* we are permitted to illustrate Mr. Wister's story of the Roseaie de l'Hay with a wonderful airplane picture of that greatest of all rose-gardens, as seen in Plate XIV, facing page 137. The Secretary's own camera has given us a most excellent and informal picture of M. Pernet-Ducher at work, as well as a collection of views and portraits relating to other rose-experiences, in Plates XII and XIII.

WHEN I reached Paris on May 1, I found that the city flower-markets were filled with roses, most of them Hybrid Perpetuals, with Ulrich Brunner predominating. The flowers were of good quality, but with rather short stems. In the flower-stores, the quality of the roses was very fine, and more modern varieties were shown, often with long stems; and here I noticed particularly the variety Juliet, a rose we do not often see in America.

I went to Holland the middle of May to see the bulbs in bloom, and in nearly every city that I visited the cut roses in the florists' windows were exceedingly fine.

I reached England in time for the Chelsea show which opened on May 23, and there I saw more roses than I had ever seen before in any other flower show, not only in cut-flowers, but in pot and tub plants. In many displays the big tubs of climbers stood out, and I was proud to notice how many American varieties were shown, particularly American Pillar, Dorothy Perkins, and Hiawatha, in specimens 10 and 12 feet high.

The number of varieties shown was almost beyond belief. There were some 131 varieties exhibited in London, and in Paris 36 sorts were shown. At the rose nurseries, too, very many varieties were seen.

There were also many novelties, literally hundreds of them. I must in frankness say that they disappointed me, not because they were not fine, but because, as Mr. McFarland stated in last year's Annual, the breeders keep on striking the same



PLATE XII. Mons. Jules Pernet-Ducher, the famous hybridizer, as photographed in June, 1922, by John C. Wister, at Vénissieux, near Lyons, France. (See page 130.)

note. The English rose situation in that respect is much the same as the dahlia, iris, and gladiolus situation in America.

Among the roses which have been introduced in the last few years, I was particularly pleased with the Pink Delight, a single Polyantha of soft rose-pink. The flower is as large as an Irish Elegance, and from a distance it would pass for a single Hybrid Tea.

Another variety that impressed me was Padre, a gorgeous flame-colored rose which was described in last year's Annual. A wonderful yellow was Rev. F. Page-Roberts, which has received a Gold Medal from the National Rose Society. Another striking rose was Mrs. Oakley Fisher, a single-tinted salmon-copper, which, I presume, would not stand up under our conditions. The official description states that the color is close to Lady Hillingdon, but that was not the case with the flowers that I saw. Sovereign was another good coppery yellow. Two good crimson Hybrid Teas were Audrey and Leonora.

Fine Polyanthas were Queen Wilhelmina, a pale pink, and La Reine Elizabeth, the most brilliant red I have ever seen. I learned later that this color is unfortunately apt to burn outdoors, so that its value may be entirely for forcing. Coral Cluster, which received a Gold Medal in 1921, has a dark pink bud and opens paler.

Rev. J. H. Pemberton, the author-hybridizer, exhibited a number of novelties, of which Ruth, an orange-carmine Hybrid Tea, pleased me the most.

Prominent among the cut-flowers were the American varieties, Richmond, Hadley, and Los Angeles, and, of course, the new French sort, Souvenir de Claudius Pernet, was everywhere.

I had the opportunity while in London of meeting Mr. Courtney Page, Honorable Secretary of the National Rose Society. He told me that that organization had over 9,000 members, and was growing rapidly, and he made to me the astounding statement that if I were to go with him to one of the big London railway stations in the morning he would guarantee that out of a hundred thousand commuters we would see, every second person would have come, that morning, from a home where there was a rose-garden, or at least a few rose plants growing. When you go through the English country and see

climbing roses on every house, you can readily believe that this is true. Perhaps in our climate such luxuriance of roses will never be possible, but I am sure the day will come when new hardy roses, produced in America, will be grown in every state of the Union. The future of American rose-growing must depend upon American breeders, and not upon Europeans who are working for roses for a different climate.

After the Chelsea show, that at Paris, opening on May 26, seemed small, but it was a large show from an American point of view. It contained many fine roses, particularly in potted standards, and the quality of all the roses were exceedingly fine, in spite of the very severe hot spell.

One of the biggest displays was by Auguste Nonin, who showed, among other things, his new climber, *Ile de France*. It is a magnificent flower, on the order of the American Pillar, but distinctly semi-double. We Americans can at least be proud that this fine variety is a result of a cross of two American varieties—American Pillar and *Hiawatha*.

American Pillar, Dorothy Perkins, *Hiawatha*, and *Excelsa* were again in evidence here, and it was fine to see that American sorts are so much appreciated.

The display of bush roses included many varieties in splendid condition, among them such novelties as *Souvenir de Claudius Pernet*, *Souvenir de Georges Pernet*, *Souvenir de George Beckwith*, *La France Victorieuse*, *Georges Clemenceau*, and *Aspirant Marcel Rouyer*.

The annual judging of new roses at *Bagatelle* took place on June 15. As Mr. Pennock has described the work of last year's jury so well, it is hardly necessary to go into much detail, this year's work being much the same. The jury was of about the same size, but was augmented this year by a representative from Spain, M. Rubio, Superintendent of Parks of Barcelona. I found that Mr. Pennock had made warm friends there last year, and I was welcomed most cordially as a representative of the American Rose Society. Unfortunately, it was a bad time to judge roses, as hot weather had brought the flowers out too quickly, and there had been a heavy rain the night before. There was a good deal of discussion as to whether any prize should be awarded, but the Gold Medal for the best foreign

rose was finally given to Elvira Aramayo, raised by Looymans & Company of Holland.

Judging roses only at shows is unsatisfactory as it is not so much the flower as the skill of the grower that is judged. At Bagatelle, if the conditions are bad for one they are bad for all, and the rose that does best under bad conditions is certainly the best rose from a garden point of view, although, of course, not from the point of view of the florist who can provide special conditions.

The Gold Medal for the best French rose was not awarded at this time, but was given in September to Toison d'Or, a production of M. Pernet-Ducher. Other roses particularly cited by the jury were: Regina de Alvear, Mme. Autrand, Madaleine Pacaud, Jules Tarbart, Geisha, Independence Day, Venus, Lady Elphinstone.

The following sorts were also in good condition: Portia, Dorothy Howarth, Puck, Rev. Williamson, Diana, Jacotte, Docteur Bechet, Monette, Evelyn Thornton, Ariel, Adonis, President Poincare, Macbeth, Mme. Herriot Panachée, President Cherioux, General Smuts, 2.980, G. H. J., Lady Maureen Stewart, Hawlmark Crimson.

With M. Turbat and M. Chenault, I went out to visit Nonin's Nursery, and here I saw the beautiful new climber, Ile de France, growing outdoors. With it I noted also Petit Louis, which, M. Nonin says, is nearly two weeks earlier than Dorothy Perkins. I was also much taken with Edmond Proust, Ferdinand Roussel, Joseph Lamy, and Leontine Gervais. Nonin's Nursery is an exceedingly interesting place to visit, for there are to be seen many fine specimens of roses. Among them are many weeping standards, such as American Pillar, Dorothy Perkins, and the like, top-worked at a height of 6 to 8 and 10 feet.

On June 17, I had the good fortune to be the guest of M. Gravereaux at the Roseraie de l'Hay. This is assuredly the most wonderful rose-garden in the world, and one could here spend many weeks in profitable study. The gardens cover a long and rather irregular shaped piece of ground of about five acres. The beds and borders are of geometric design, and are divided each from the other by high trellises of climbing

roses. Coming in from the entrance one enters first the great display garden where large beds, each containing only one or two varieties, make a brilliant exhibit of bloom. The many pink varieties were balanced everywhere by the white rose Louise Cretté, a most wonderful production.

On the west side is the Garden-house and in the center of this building is the museum, with the walls decorated with paintings of roses and of the late M. Gravereaux and his family in the garden. Here is also a showing of the use of roses in the arts: rare tapestries, china with rose designs, carved wood, bronze work, and old books. In an adjoining room is the working library and office, with its card catalogue of the plants in the garden—for the collection contains upwards of 7,000 species and varieties. The view into the display garden from the Garden-house is charming. Great masses of color lie before one, broken by occasional standards, or by pillar roses or pieces of garden sculpture. In the center is a pool with a small fountain, and at the back and sides high trellises of climbers frame in the picture.

From this display garden we walked under rose-arches into numerous smaller gardens, varying in size and shape. By the side of a long path is a collection of rose species from all parts of the world; along another, the roses mentioned in history or in literature. One small garden is devoted to roses valuable for perfume, and contains, among other things, a collection of *Rugosa* seedlings developed by M. Gravereaux during his experiments with roses for commercial perfumes. Another garden contains Hybrid Perpetuals; another Hybrid Teas. One of the smallest enclosures is given over entirely to Polyanthas, and a special garden is devoted to trials of novelties. At the end of the series of gardens is an outdoor theater with raised seats of turf, where outdoor plays, pageants, classical dances, and musicales can be given.

Everything is complete, and no obtainable rose is omitted from this wonderful garden, which serves not only as an object of beauty but as a living museum, showing the development of the rose during the centuries culminating in the wonderful hybrids of today. The gardens are kept immaculately clean from weeds or dead flowers.

On June 19, I went to Orleans to visit the rose nurseries, stopping first at the great nursery of M. Turbat, who has been particularly interested in Polyanthas, many of our best varieties coming from his establishment. Here were André Lenoble, Eblouissant, Le Loiret, Triomphe Orleanais, and Suzanne Turbat, the last named for M. Turbat's daughter. Among the climbers were Fraicheur, Climbing Triomphe Orleanais, No. 221, and a lovely pale pink Wichuraiana, No. 263, the most remarkable rose I have ever seen. It was covered with big clusters containing as many as fifty flowers in a cluster, each flower at least an inch across. Other roses much admired in this nursery were: Ethel James, Hawlmark Crimson, Lady Mond, Mme. Alexandre Dreux, Mrs. John Cook, Mrs. Oakley Fisher, President Bouché, Reinhard Bädcker, Souvenir d'Antonin Poncet, Souvenir de Claudius Pernet.

Leaving M. Turbat, I paid a visit to Barbier & Co., one of the oldest nurseries in France, from which have come many fine roses. Here I saw Albertine (*Rosa Wichuraiana* × Mrs. Arthur Robert Waddell) and Jacotte (*R. Wichuraiana* × Arthur R. Goodwin) making an extremely fine showing of their beautiful Pernetiana-colored flowers; but I was sorry to see on some of the plants a slight tendency to black-spot. If this persists, it may condemn these roses in spite of their beauty. Eugene Barbier was also a fine rose of this type. Other roses admired here were: Jules Tarbart, La Champagne, La Somme, Mlle. Louise Criner, Mme. Pizay, Mrs. Henry Morse, The Queen Alexandra, Rheims, Souvenir de Sergent Cretté.

I was much impressed with the many seedlings that M. Barbier was growing and with the great freedom of bloom shown in spite of the fact that he said that the hot weather of the previous two weeks had destroyed the flowers.

On June 27, I stopped off at Dijon to visit again the home of the famous rose Gloire de Dijon, which was originated in 1854 by M. Jacotot in a little garden near the center of the city. The nursery is now kept up by the grandson, but roses are no longer the chief specialty. The original plant, which grew for many years in the corner of the property, is now dead.

On June 28, I arrived in Lyons and at once set out to visit M. Pernet-Ducher. I found that to do so was by no means

easy, as to go to Venissieux is a long ride in one of the roughest trams I was ever on. Although the tram went slowly, it seemed every minute that it would jump the track, and I cannot imagine that riding on a camel would be any worse. Arriving at the little public square of Venissieux, I asked for M. Pernet-Ducher, finding, as is so often the case with a famous person in his own town, that he was apparently totally unknown! After inquiry in five or six little shops, I finally found an old butcher who knew the way. He directed me to take the first turn to the right and then the second turn to the left, following which, after several miles of hard walking in the hot sun on a very dusty road, I found the house of M. Pernet-Ducher. It opens directly on the street, and behind it is a little nursery. What view there is over the high walls around it shows the nursery to be entirely surrounded by factories, so that it is far from an attractive place.

M. Pernet-Ducher apologized profusely for his roses "on account of the poor weather," which seemed entirely unwarranted, as the plants looked good to me, being quite healthy and literally covered with bloom. The center of attraction was, of course, *Souvenir de Claudius Pernet*, and near the large block of this variety was *Souvenir de Georges Pernet*, another great rose. There was also a collection of the older *Pernetiana* varieties, and, yet more interesting, thousands of seedlings which are being tested, but about which M. Pernet-Ducher was very disdainful, saying there was very little among them of any value. I was interested to see also thousands of little twisted papers on the rose stems, covering flowers which had been crossed by hand this season, and from which we have every right to expect many fine new varieties to come.

I had never seen hybridization on such a large scale, and the procedure interested me greatly. I was also much impressed by the care with which M. Pernet-Ducher tested and judged his new garden roses. His standard is high, and other people might name and send out hundreds of varieties each year from seedlings he has produced. He insists, quite truthfully, that his care in the past has given him a high reputation, which he must keep up, and he is therefore most careful to select only the very best of his seedlings for naming. He expressed to me

his appreciation of the honor bestowed upon him by the American Rose Society in making him an honorary member, and wished me to convey his best wishes to the officers and members of the Society.

The next day I went to see M. Charles Siret, who is also a long distance from the city. He is Secretary of the Société Française des Rosiéristes, and is much interested not only in the improvement of the rose but in increasing its popularity in France. One takes the tram from Lyon to Monplaisir, and asks every shopkeeper in the place the way to Chemin-de-St. Priest. With good luck, in a French town, one can find one person out of every twenty-five who knows the way around his own town, and so my patience was rewarded finally in being directed which way to go.

Finding M. Siret at his home, I was immediately invited to stay to lunch, and to visit other rose-growers with him. I shall never regret having accepted. He took me first to his little nursery, which is quite new, but contains many fine things, among them, of course, *Souvenir de Claudius Pernet*, with which he is greatly pleased. He then took me to see M. Ducher, a nephew of Pernet-Ducher, who had a rose nursery of several acres full of bloom and also large numbers of seedlings for budding. From there we went to the nursery of M. Pierre Guillot, Monplaisir, which is much bigger, and one of the best that I saw. They had many fine seedlings coming along, and here also I saw thousands of twisted papers covering flowers which had been crossed by hand. Behind M. Guillot's house was an exquisite garden of specimen roses which was a sight in its freedom of bloom.

Everywhere I went, in both France and England, I was greeted with the most cordial hospitality, the name of the American Rose Society seeming to open all doors to me.

I was constantly impressed not only with the great beauty of the foreign roses, where they are at home, but the great care and skill of the growers. No matter how much we may envy them the mild climate that makes rose-growing easier for them than for us, we must in our hearts acknowledge that it is their great love for the rose that makes them willing to work so persistently for its improvement.

The Greatest Rose-Garden in the World

By J. C. N. FORESTIER

EDITOR'S NOTE.—It is fitting that, in connection with Mr. Wister's intimate account of his visit to the *Roseaie de l'Hay*, we should be permitted, through the courtesy of the Editor of *House & Garden*, to condense from the article in the March issue of that magazine this important and authoritative statement about the great garden, written by its Director, J. C. N. Forestier.

Just as this material is being revised for the press there comes a note from Mr. J. H. Nicolas, a Frenchman who has become an ardent American. Mr. Nicolas writes: "M. Gravereaux regularly visited my father in the eighties of the last century. One day he remarked that he would like to have such a roseaie as father had, saying, however, that he was too busy to give it attention. To that my father replied: 'Gravereaux, if I had your fortune, I would close up my business affairs and create the most beautiful roseaie the world has ever known.' Gravereaux did it, and L'Hay was born. Oh, for a Gravereaux in America!"

FROM the heart of Paris the shortest way to reach the beautiful rose-gardens of L'Hay is to go through the Orleans Gate. The active and noisy quarters of the Faubourg des Gobelins crossed and the city gate passed, you wind through the quaint streets of Montrouge till you reach the great paved highway linking the City of Light with Orleans and Toulouse.

Soon the rumbling and dusty National Road is left behind, and the trip continues along a small road, planted with trees on both sides, which cuts the Bievre Valley and the ancient village of Arcueil—now almost a city—to climb the Villejuif Hill.

The roadway rounds the western mountainside and offers to the eye real country scenery, well cultivated lines spotted with groups of trees here and there. At the foot of the mountain, occupying a wide opening of the Bievre Valley, a few villas can be distinguished through the green forestry curtain. Farther away, in the direction of Bourg-la-Reine, the landscape includes the town of Sceaux and the parks of its ancient royal chateau, with sloped woods of Meudon and Verrieres in the background.

This picturesque roadway runs along the Plateau of Villejuif, otherwise called the Plateau of Longboyau, for about a mile and a quarter, till you reach the village of L'Hay. Two more turns of the road, cozily narrowed by ancient walls, and the *Roseaie de l'Hay* is reached.



PLATE XIII. The Secretary's Busy Kodak on His European Rose Visits
 1, Mons. Leon Chenault, a famous Orleans nurseryman; 2, Mons. E. Turbat, the Orleans rose-nurseryman; 3, 4, 5, The Bagatelle (Paris) Rose-Gardens in June, 1922; 6, A rose nursery at Lyons; 7, In the Bernaix nursery at Orleans; 8, Rose grafts under bell jars at the Turbat nursery, Orleans. (See pp. 129-131.)

The rose-gardens of L'Hay, which for the past two centuries have been the vacation grounds of wealthy Parisians, are now the property of Mme. Gravereaux. Respecting the traditions of the palace, Mme. Gravereaux has framed and placed in the reception hall a list of its successive owners.

The old familiar fence encloses a pretty, shaded yard. The house, of measured proportions, has the character and design of the villas built in the environs of Paris from the end of the eighteenth century to the days of Napoleon I. The gardens form a balcony for this, facing south, and continue the terrace. In the gardens, almost concealed by the foliage, is a dainty Norman chalet. Toward the right is the beautiful vista of the sunny terrace and to the left, behind the Norman chalet, under the shadow of centenarian trees, several climbing alleys lead to the scented and world-famous Roseraie.

All sorts of flowery arches and porticoes surround the numerous rose-beds. In the midst of these, facing a high semi-circle of light wooden framework covered with roses, the calm surface of a pool mirrors the flowers. Low hedges surround it, each one bearing a different variety of roses.

The first two rectangular bushes at the entrance of this large adorned enclosure are, from right to left, Joseph Guy and Rödhätte roses respectively. It is the spot reserved for the prettiest blooms. Here can be admired Mme. Caroline Testout, Captain Christy, Mme. R. Poincare, Commandeur Jules Gravereaux, Candeur Lyonnaise, Souvenir de Claudius Pernet, etc. The flowers are all of one color.

Many persons of taste prefer the vigorous masses of similar shades of flowers, and this idea is oftentimes a principle in the composition of a whole rose-garden. Thus, the many arches, porches, and frames are covered with one distinct variety of roses, and so part of the garden bears all red roses and another part pink, then, further away, placed in a group, the yellow shaded roses, gradually fading until the white ones are reached. This is a beautiful theory indeed, but oftentimes, developed practically, the results are unhappy.

I feel it easier to obtain a continuous brilliant effect in an ensemble of roses by opposing contrasting colors, or assembling lightly varied shades. Moreover, to aid the foliage, rose bushes

often being unable perfectly to make the indispensable green background, it is necessary to place green hedges of other plants with thick dark green leaves. The mixing of different colored roses does not handicap the maintenance of a methodical distribution in the collection, but to repeat the same rose in the plots or along the ornamentation means reducing the capacity of the garden in so far as the collection is concerned. This is the reason why the single color parterres are kept to the center only of these particular rose-gardens. Although it is true that a garden should not be considered merely from a scientific point of view, it is no less true that a spectacular display can easily be so arranged that one's interest in the individual varieties of the collection can be maintained.

In the gardens of L'Hay, the area of which is five acres, there are from eight to ten thousand distinct varieties of roses, and although strict method is applied in the distribution, no efforts have been spared to prevent the monotony of a mere scientific garden. It is divided into twelve plots, which, visited in due order, show the various gradual steps in the evolution of roses since their first appearance up to this date.

The wide space where the "water mirror" is located is in the center of the garden and is named "The Garden of the Most Beautiful Roses." It is encircled by pyramids of roses. To the right are the old and to the left the contemporary varieties.

Beginning at the right, we first find the collection of interesting species from the botanic and horticultural points of view; then come the old *Rosa gallica*, the *R. centifolia*, or "hundred-leaved roses of Roman feasts and of the painters of yesterday." After that division follows the one bearing the roses that Empress Josephine used to cultivate at Malmaison. Then, nearing the central division, comes the collection of Oriental roses where can be found roses from India, the everbloomers of China, Japan, Bengal, and Persia, imported since the end of the eighteenth century to our day.

To the left are the roses created during the last few years right in the L'Hay gardens. Here also can be admired Mme. R. Poincare and La France Victorieuse. Then come the new roses which were awarded prizes at the annual Bagatelle flower fair, such as, Marquise de Sinéty, awarded first Gold Medal at

Bagatelle in 1907; Rhea Reid, created by E. Gurney Hill, of Richmond, Ind.; the Lyon Rose, Jonkheer J. L. Mock, Sunburst, Mme. Edmond Rostand, Beauté de Lyon, The Queen Alexandra Rose, Mevrouw Dora Van Tets, Paul's Scarlet Climber; Pernet-Ducher's beautiful yellow roses, Benedicte Seguin, Souvenir de Claudius Pernet; Mrs. Wemyss Quin of Dickson; and Los Angeles, the American success of 1918.

It might be worth pointing out that when I intended establishing a rose-garden in the reconstituted gardens of Bagatelle, in 1905, M. Gravereaux offered me all the rose plants which formed our first collection, all taken from the L'Hay gardens.

In the "Roseraie de Madame," Madame's own rose-garden, are found the varieties of the most coveted roses of today, such as the Ulrich Brunner, Mme. Caroline Testout, Mme. Abel Chatenay, Lady Hillingdon, Mme. Ravary, Laurent Carle, Chateau de Clos Vougeot, Juliet, etc., and besides the great flowers, the small roses which were at one time so popular in America for men's wear and house decoration.

Then, at last, comes the experimental plot where are gathered the roses obtained by M. Gravereaux from patient and careful selections for the production of rose essence. He has named this division "The Collection of Perfumed Roses." There, together with the hybrid varieties which he obtained, are other varieties of roses cultivated in territories widely known as producers of rose essence, such as Bulgaria, Tunis, and Provence.

M. Gravereaux has put the finishing touch to his work by forming a Rose Museum. Everything that mentions the rose or has been inspired in its form and decorative worth; all sorts of woven fabrics, china, sculptures, paintings, metal and wood carvings, etc., are represented in the collection of the charming little rustic house, built within the gardens.

One day, when M. Gravereaux was showing the contents of his little museum to the poet D'Annunzio, he even showed him a collection of postage stamps adorned with roses. "You are right," said the poet-soldier smiling, "when love is the guide, extremes are always attainable." This sentiment is shared by all horticulturists and lovers of roses who have derived from M. Gravereaux's achievements so much inspiration.

The Surprising Rose Climate of Rome

CORRESPONDENCE WITH THE EDITOR

In previous issues of the Annual, our alert and interested associate in the Italian capital has written in correspondence of her rose experiences. Again she favors us, covering a year of growth, and making ancient Rome seem near. Unchecked by "Quarantine 37," she is closer to the great rose centers than we are, both in distance and in regulation, and her keen observations are advance news for us.

VILLA SENNI, GROTTAFERRATA, ROME,

March 29, 1922

It is nearly time for the Rose Annual to come, and meanwhile I read your article in the March *Garden Magazine* with great interest and pleasure, and agree with all you say about roses doing well in untrenched soil. Mine have never had anything better than one deep spading and plenty of cow-manure. The important thing is to see that they are planted very firmly, about the hardest thing to persuade whoever is planting for me to do, though I both preach and practice what Peter Henderson called "The use of the feet in sowing."

Has Climbing Mme. Abel Chatenay reached America? It is a most lovely rose, very vigorous, and blooms so well quite late in the autumn, really better than most of the Climbing Hybrid Teas. Lady Waterlow was also lovely in the autumn, as well as Climbing Cécile Brunner (which has such clean foliage that it was promoted to a better place), and Mermaid. The flowers of the latter, after the petals fall, look like enormous dandelions.

Of the dwarf roses which do well in the autumn, I include Papa Gontier, Wm. R. Smith, Jean C. N. Forestier (rather coarse, but a glorious color), Mrs. Bullen, Constance, Willowmere, Lady Ashtown, and, among the singles, Isobel, Irish Fireflame, K. of K., and Red-Letter Day. This last is so fine and true a red and so free flowering in the autumn that I have put in over twenty plants.

Constance seems to me an uncommonly good yellow rose, and very free in blooming. We have had a cold and windy winter, once with eight inches of snow, and as this stopped the autumn blooming, I took the opportunity to prune all the bushes almost to the ground, so have had no winter blossoms. Today there is snow on the nearby hills, but I have gathered the first two roses of the year from Bardou Job, that most regular herald of the rose season. Beauty of Glazenwood (Fortune's Double Yellow) is ready to burst into bloom if only three days of warm sun come and the Anemone Rose and the wistaria are waiting for each other. . . .

In the spring the Countess visited the great rose show in London, of which Mr. Wister also has written. Her observations follow:

May 30, 1922

It was too cold in Paris to see any flowers, not even tulips, and in England they told me the season was a good six weeks late. . . .

I was very lucky, however, for the spring rose show came the day after our arrival in London, and I had the advantage of meeting Mr. Easlea, who took

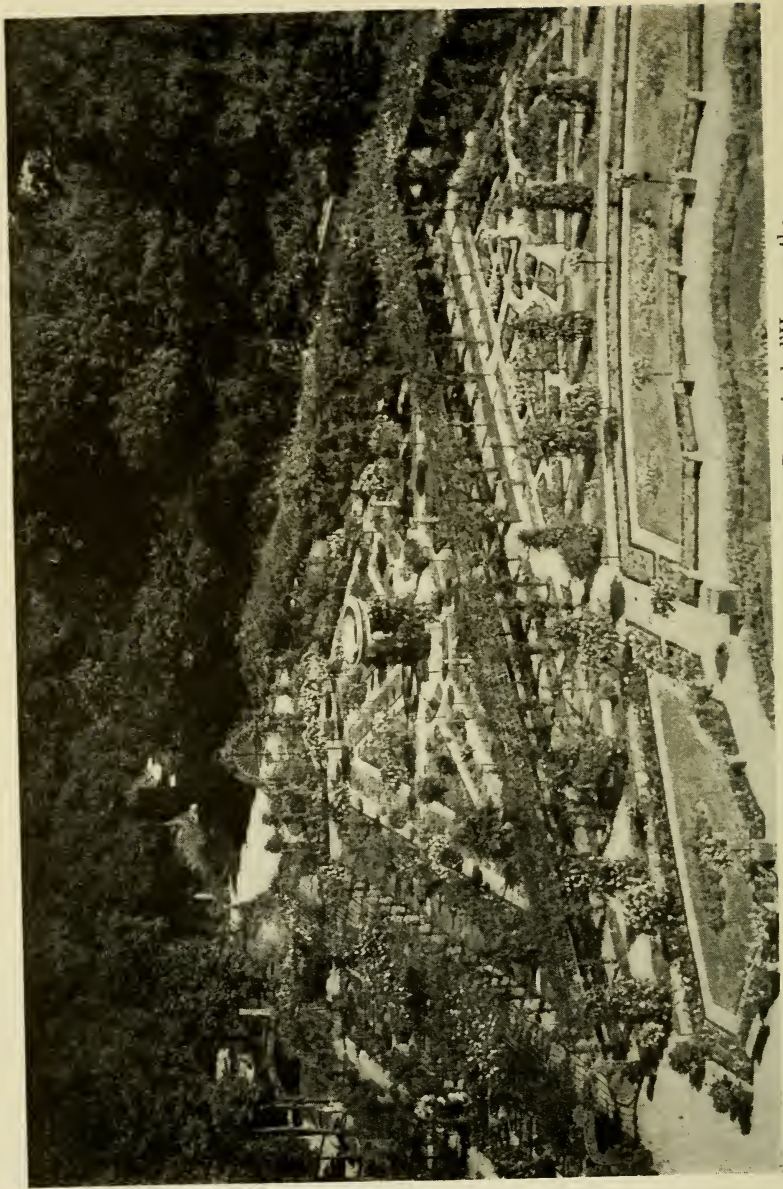


PLATE XIV. An air-plane view of a section of the Roseaie de l'Hay, on the Gravereaux estate, near Paris

(Photograph by courtesy of *House and Garden*, New York. See page 132.)

me around. . . . I saw for the first time the celebrated English exhibition boxes, with their large individual blooms like cabbages. . . .

Padre and Mme. Butterfly were quite the most noticeable groups; the latter is probably well known in America. Padre was a glowing note wherever it was placed. Of course, these were roses under glass, and my one plant of Padre did not look so remarkable here last week, but I must wait until autumn to judge. Some of the newer red roses disappointed me—Crusader and Covent Garden seemed “blue”—and the finest and certainly most fragrant bowl was Hoosier Beauty.

A beautiful new rose was Sovereign, quite a deep orange-yellow very much on the order of Duchess of Wellington (which is one of my favorites). I shall certainly get it as soon as possible.

Lady Roundway was also very lovely, a fine tangerine color—I think Mr. Easlea said it is not in commerce. Constance Casson was a beautiful soft warm color; Lady French a good pale pink; and another was Mrs. Curnock Sawday. Elsie Beckwith seemed fragrant, and a fine deep pink, though both it and Premier have a tendency to a bluish tinge. Mrs. Fred Searl was a good warm pink, and Elizabeth Cullen very attractive indeed. A new Polyantha of Mr. Cutbush is Pink Delight, a single clear light pink, which will be, I think, more attractive than most of its class. There was a very fine bowl of Souvenir de Claudius Pernet, but personally I do not like it as well as various other yellows—Constance or Christine. It is a very even yellow, but lacking in interest.

The world-round value of membership in the American Rose Society appeared when it served as an introduction to an evidently delightful visit as thus detailed:

The other day a Norwegian wrote me saying he was in Rome and was a member of the American Rose Society! He came out and spent two hours in the garden and we had a very interesting talk. He was quite aghast at the way this hot wind can take all the color out of a red rose and leave it white or dirty pink. One quite lovely rose in bloom that day was Mlle. Yvonne Lornage—I think it is a Hybrid Tea or Noisette. The buds were rich in color, like Mme. Edouard Herriot. Baby Lyon Rose is very fine indeed, with so many and such dainty flowers. He was very much impressed by Dr. W. Van Fleet and American Pillar, and also by Mermaid, just now at its best.

At the end of 1922 there comes an account of the organization of a horticultural society in Rome, with the story of the first show, and an appeal for interest and help from America. It should be noted that this is no “sob story”!

December 15, 1922

This has been a busy autumn. We had an absolute drought from April 25 to August 31, and exceptional heat (104°) in August. Then it rained, and in September rained several times, and the effect of rain after such a summer is very curious. By the end of October I could gather at the same time a few violets, chrysanthemums, wallflowers, dahlias, apple and pear blossoms, Paper-White narcissus, and, of course, roses, cosmos, and other things. Now we are in our ninth day of hard, brilliant cold weather, with the ground frozen six inches and a temperature of 25°! You see, there is no chance for monotony in Roman gardening, for one never knows what kind of a season one will have!

A new horticultural society has been started in Rome, and I hope that

eventually it will do something for horticulture there. In the beginning we amateurs must work, for it has been organized by professional florists, who have always been very backward. They had a big exposition this autumn, which was very successful.

I had taken two yards of space for roses, but the weather was so bad that I was afraid of having nothing fit to bring. However, one look about the room for cut-flowers showed what a poor lot there was, and encouraged me to set up my six or seven bowls of roses. These were a great success, and most of the people who came vowed they were artificially dyed, or were of silk, or had something mysterious to explain their brilliant coloring.

I do not know why Rome should be this way, for all the people love flowers, and the poorest windows generally have a few pots of them, but the fact remains that there are few flower-gardens, no garden papers, no means of putting flower-lovers into communication with each other. The new society may help, and what will surely help still more will be the new rose-garden which is to be started in Villa Borghese, the main park. It will begin very modestly, for the city government is quite poor this year, but in this wonderful climate the roses should do very well and be an education to all the people who go there. Several of the best French growers are offering plants, and perhaps next year some of the Americans may care to do likewise—the roses should be sent by parcel post, well packed, to the park director: Cav. Nicodemo Severi, Casino Dell' Orologio, Villa Borghese, Rome. . . .

I have Emily Gray, but so far it has flowered very little. Paul's Scarlet Climber flowered again this autumn, but I think that was a "freak;" it is certainly one of the finest reds, although not a heavy bloomer. Mermaid gets better and better, and is climbing well (some English papers made me fear it might not), and this year I hope to try Seafoam, another hybrid of *R. bracteata*. This autumn, Golden Emblem was so fine that it went to almost the first place in my affections, with Wm. F. Dreer a close second. At one time I had a large bowl of these two, with Constance, Margaret Dickson Hamill, Marquise de Sinety, and Duchess of Wellington, and they were quite the richest color imaginable. It is a far cry from the old yellow Tea roses.

To the Editor's suggestion as to the general conception here of the Roman climate, the Countess gives the facts in late January of 1923:

January 21, 1923

. . . I have to smile to read that you consider this a subtropical climate, for today we are blockaded in the house by a raging south wind at a temperature of 32°, our nearby hills—four and five miles away—have snow, and all southern Italy is quite snowbound. This comes after five or six days of severe frost. It is true that this is, so far, an unusually cold winter, but that is the difficult part of our climate, which renders gardening a lottery. It is too cold for good oranges and too warm for good apples, but I try both. . . .

It may seem odd that flower-gardening is so little developed here (there is more in northern Italy), but the whole tradition has been toward shrubs and water and trees, the beauty of design and the play of light and shade, and undoubtedly rightly, for flowers have an uncertain life here. One year one may have things which the next year are killed by greater heat or drought. There is everything yet to be done to create a "gardening atmosphere," and it will take time. I think roses may well be the opening wedge. In May, I hope, if all goes well, to exhibit roses and sweet peas and tulips, but there is always the risk of a hot April ending the last two.

COUNTESS GIULIO SENNI.

A German Report on the New Roses

CORRESPONDENCE WITH THE EDITOR

FEW, if any, rose nurserymen in America obtain and frankly test the new roses, and no one of them reports about new roses. Our correspondent in northern Germany, at Sparrieshoop, in Holstein, is a lover of roses, a hybridizer, and a very keen and candid observer. As the new sorts he has written about will generally appear in American catalogues, and probably with enthusiastic descriptions, what Mr. Kordes writes is distinctly worth preservation and consideration. He has unexcelled opportunities for studying roses; Mr. S. S. Pennock reported last year on a most interesting visit to his place.

SPARRIESHOOP, HOLSTEIN,
December 4, 1922.

In the following letter I have tried to give a fair summary of our experience with the new roses. Having, perhaps, the largest fields of strictly new roses, we are able to give a rather exact statement as to the newcomers. The past summer, however, due to many cool, sunless days, we were unable to observe definitely as to many of them. A few roses did well despite the unfavorable weather.

To begin with the American sorts: William F. Dreer will be fine here in a few years, as will also Mrs. S. K. Rindge. Crusader grown outdoors produces flowers of a beastly color—an awful hue of carmine, black, and blue—but is fine under glass. Miss Lolita Armour is worthless because of its weak neck, which allows the blooms to droop. Rose Premier is poor outdoors, but fine in the hothouse, and Frank W. Dunlop is much subject to mildew outdoors. Hill's America produced but a few fine flowers outside, while Citronelle did not succeed, owing to the cold weather.

Of the English sorts I can write with more certainty. Westfield Star will be popular where Ophelia is admired; its fine citron-yellow bud and white flowers are wonderful. Mrs. Charles Lamplough, a giant rose, but nevertheless a real gem, is a cup-shaped, pure white variety that produces blooms which delight the heart of old exhibition-box enthusiasts. In addition to its other good traits, it is free-flowering, is not bothered by fungous pests, and opens well in rain.

Padre has also shown its good characteristics here, and I was further impressed with it in the fall when it continued to bear on long stems a large number of its pretty glowing orange flowers, tinted carmine. Hawlmark Crimson is a first-rate decorative variety, and is, perhaps, the darkest single rose grown. It belongs to the so-called Irish roses, and has the habit of Red-Letter Day, with the added advantage of non-bluing velvety crimson color.

Mrs. Redford started the season gaily with beautiful, medium-sized, well-shaped blooms of brownish yellow tinged with carmine-red, but as the season advanced, not a bloom was produced that half equaled the first in beauty. Mrs. C. V. Haworth is much better than Mrs. Redford, and is a real winner. It will be liked for the garden or the table, and in decorative work. Its blooms rarely disappoint, and its strong growth, free-blooming quality, and hardy constitution

add to its desirability. The very pointed, high-centered buds open to quite flat flowers with lovely yellow stamens and petals that curl like those of a dahlia. It is a distinct biscuit-yellow in color, tinged with reddish hues.

Mrs. Henry Morse perhaps ranks next in good qualities. It has so many fine points that its faults can easily be overlooked, and it is a rose over which the connoisseur will go into ecstasies. It is a fine rose-pink in color, with old-gold shadings and a lighter surface to the broad petals. In the fall the color becomes less intense and at times takes on a grayish hue. Archie Gray is disappointing. Sometimes the blooms are fine, but most of the flowers are not held erect. It is carmine-red with velvety shadings.

Capt. F. Bald is a fine garden rose, but it will not please those who demand a long stem. It is a finely formed flower of an even crimson hue, with no blue tones. The plant is of rigid, upright habit, and all the flowers are borne at a uniform height over the graceful, pleasing green foliage which is disease-resistant. Covent Garden, another red rose, is not comparable to the preceding. It is a purely commercial rose and is a vigorous grower well covered with bronzy green foliage and having reddish bark. The buds are long-pointed, with strong necks, and open into broad-petaled flowers of a uniform glowing crimson that will be popular with all rose-lovers. In hot, dry weather, the flowers are small and not well colored, but in cool weather the buds and blooms are wonderful.

Lady Maureen Stewart is only a moderate grower, but the dark velvety crimson blooms, never stained by blue or gray undertones, will delight a real rose-lover. Emma Wright, a semi-double, coppery red rose with yellow shadings, has finely curled petals and opens perfectly flat. It is a graceful decorative rose, and is also free flowering in the garden. Mrs. Oakley Fisher has quite upheld its reputation. It is a new break in color in Irish roses—a uniform egg-yellow. It seems to be a good keeper, and the blooms appear in masses.

Rev. F. Page-Roberts, a pure honey-yellow rose of good build and substance, is a fine garden acquisition, but its habit of bearing its blooms sideways instead of upright may bring it into disrepute. It is obviously fungous-proof and a vigorous grower. Sunstar is both a fine garden rose and an excellent sort for decorative purposes. Its buds are exquisite in their unique coloring—pure orange-yellow, with more or less intense vermilion stripes along the edges of the petals. If it held its color until the petals dropped, it would be a masterpiece.

The General proved to be as hardy as a Hybrid Perpetual, though it is a Hybrid Tea. It is a good blood-red garden sort that will be highly esteemed. The flowers are extra fine and large and always open perfectly; not subject to fungous pests. Martha Drew will find admirers among those who delight in exhibition roses. It is a pearl-white variety of great substance and large size.

Una Wallace has been fine here. It appeals more to me than any of the newer English roses. It is a striking reddish pink, very shining and fresh—a color that perhaps will soon be wanted for cut-flower purposes. In growth it is rigidly upright, and bears its flowers singly. The plants mildewed for me.

Among the French roses that we have tested, Aspirant Marcel Rouyer shows again the master-hand of M. Pernet-Ducher. It is a perfect rose—as a bud it is long-pointed, of lovely shape, and when open it is a solid mass of reddish gold, with, at times, a carmine hue. The plants are healthy and fairly free-flowering. Jean C. N. Forestier did not do well this season, although as an old plant it did well in another location. I wish many other good sorts had its vigorous habit of growth. Mlle. Louise Criner, a white rose, disappointed me.

Mrs. Farmer is a rose that delights in cool and even wet weather, and under these conditions produces blooms of striking colors. It is a two-colored rose, having solid golden yellow petals with the reverse reddish apricot.



PLATE XV. English Gold-Medal and Certificated Roses of 1922
 1, Alice Amos; 2, Nur Mahal; 3, Mrs. Henry Bowles; 4, Westfield Star;
 5, Florence M. Izzard; 6, Capt. Kilbee-Stuart.
 (Photographs by courtesy of Mr. Courtney Page. See page 142.)

Souvenir de George Beckwith may lose out in comparison with Los Angeles, but whoever likes a large, full rose of a distinct copper color will find that it has many good points. Elegante is a fine and little-known gem—we have no other golden yellow Hybrid Tea that comes so true in all weathers.

Mme. Pizay is an improvement on Mme. Mélanie Soupert in character of bloom, and the plant grows more bushy and blooms more freely. This rose made a good impression here last summer, and I consider it a fine acquisition.

Of the Dutch originations, we have tried the following:

Etoile de Hollande is a truly magnificent rose that I do not hesitate to recommend. The blooms are rather full, with broad, heavy petals of dark velvety crimson which never fades or “blues.” It opens well in the worst weather. Gloire de Hollande is in some respects a fit companion for Etoile de Hollande; it has the most glowing blood-red flowers that one can imagine, but it is apt to “blue” at times. If the growth of Gloire de Hollande could be combined with the perfect bloom of Etoile de Hollande, what a rose!

Hortulanus Fiet is particularly an amateur's rose, and one he will delight in if he is looking for quality of bloom, not quantity. It has large, thick buds of perfect shape which open slowly but surely to wonderful giant flowers of golden yellow. Hortulanus Budde could be described as follows: If you took Mme. Edouard Herriot and made it bloom more freely, then gave it a glowing fiery red color, you would come near having a rose like Hortulanus Budde.

Of German roses there are but a few to discuss:

Frau Oberpräsident von Groote has “made good” this summer and has many admirers. Having the same color and shape of bloom as Farbenkönigin, it is, in addition, a strong grower and a freer and finer bloomer. Edouard Behrens and Preussen, our own novelties, have, since their appearance found a host of friends and will be in great demand for some time to come. Camillo Schneider has shown a lot of perfect blood-red blooms this summer, and it was much commended for its free-flowering habit. It is a strong grower, with a profusion of long shoots carrying the finely formed, good-sized flowers.

S. S. Pennock has also done well, although the weather did not encourage it. I had a lot of them indoors and have been much impressed with the glowing color it shows under glass. It comes very near Killarney Brilliant in color, but the flower is of enormous size, with broad, shell-shaped petals, and is borne well up on extraordinarily long stems. Wilhelm Kordes was surely the wonder of the year. The bloom has much of the perfect form of Mme. Abel Chatenay, and the bud is high and well formed, always opening to perfect blooms. The first flowers are very large, but the medium-sized ones that follow have the better color. The ground-color is a solid golden yellow on the outer face of the petals and at the bottom of the flowers, but when the sunlight touches it, it takes on a color that ranges from the brownish red of *Rosa lutea* to the crimson of Hugh Dickson.

There is but one more rose on which to report, and that a French one—Souv. de Claudius Pernet. I had, perhaps, one of the largest plots of this rose under observation, and have come to the conclusion that it is not a good sort for every location, but neither is it deserving of utter rejection. Indoors it was fine, but outdoors our 7,000 plants have taught us a lesson, for they only open their wonderful blooms in dry, warm weather. A wet season, such as we had last year, will cause all the buds to rot on the plant. If we have a hot, dry summer this year, it may possibly prove that this rose has fine qualities.

WILHELM KORDES.

The New English Roses of 1922

By COURTNEY PAGE

Honorable Secretary National Rose Society of England

EDITOR'S NOTE.—Again we are indebted to Mr. Page, not only the active secretary of the great National Rose Society of England (with more than 9,000 members, Mr. Wister tells us), but the best informed and most capable critic of new roses anywhere, who candidly presents to us the year's doings in Great Britain. It hardly need be said that Mr. Page's descriptions are much to be preferred to the adjectival outbursts of some of the English catalogues! We find them so dependable that in "The New Roses of All the World," beginning on page 147, we refer rather than redescribe.

The beautiful photographs supplied by Mr. Page are reproduced as Plates XV, XVI, and XVII.

AS THE years go by, the award of the National Rose Society's Gold Medal must seem to some of the raisers of new roses to be harder and harder to obtain, and one cannot help feeling sorry for those who, after taking so much pains, have their new productions fail them on the "day of days." It is quite certain that many of the new varieties one saw during the past year that failed to obtain recognition will be staged again, and may come into their own.

I have recently been perusing the catalogues of the last forty years of that world-famous rosarian, Mr. William Paul, and what an interesting study they make! It was Mr. Paul's custom to give with each issue two or three large colored plates of new roses, from the originals painted, I believe, by his daughter. It is possible to trace with them the evolution of the rose from the time the National Rose Society first instituted its Gold Medal award. In his catalogue for the year 1884 he gives the names of "two good new show roses" (the term "exhibition" is more recent), Ella Gordon and Lady of the Lake, and described them as of "a very fine globular form, large and full, petals thick, smooth, and well rounded," and he goes on to give an illustration of a "globular bloom"—a type at which one would not look twice today. There is also a very fine colored illustration of a new rose, Queen of Queens, described as "a perfect rose, large, full and finely formed," the buds of which are fat and round, while the fully expanded bloom is as flat, or flatter, than a pancake—nevertheless superb in its

day. I wonder what he would have said of Los Angeles, William F. Dreer, or Columbia.

In that catalogue are the names of 364 varieties of roses then in general cultivation, not a dozen of which survive today. To us who are older, that fact perhaps seems a pity, because it means the loss of old friends, but it is the result of progress—progress that has been brought about solely by the wisdom of the National Rose Society in instituting in 1883 their premier award, the Gold Medal for new roses.

For the benefit of your new readers it is well to explain that in this country new roses are placed in two sections: (1) Exhibition roses, or those best suited for staging in exhibition boxes or as specimen blooms; (2) garden and decorative roses, or those best suited for general cultivation, such as Ophelia, General MacArthur, or Richmond.

Two awards are available for new varieties, the higher a Gold Medal and the secondary award a Certificate of Merit. These awards are made at any of the Society shows, by a specially appointed committee consisting of amateurs and nurserymen, to roses grown under the prescribed conditions. The varieties that receive the Gold Medal are known as "Gold Medal Roses." The Certificate of Merit is given when a new variety is not up to the high standard demanded by the New Seedling Committee, and its bestowal means that they would like to see that particular variety again. These two awards are now so generally recognized that few new varieties are sent out without one or the other of the awards attached.

When the awards are made the new varieties are not yet in commerce. At least six blooms of each variety must be staged, together with a plant as grown in the ground. The raiser having staged his blooms retires from the tent, and the New Seedling Committee have to consider the following points: (1) Is the variety of merit as a novelty? (2) Is it an advance on existing varieties? (3) Is the plant exhibited of a vigorous habit? (4) Is it free flowering? (5) Is it free from mildew? (6) Its sweetness of scent? Each judge separately and carefully weighs its good and bad points.

It gives me very great pleasure to yield to the Editor's wish and briefly describe the new roses of the year 1922.

A Gold Medal was awarded to each of the following varieties:

Mrs. Henry Bowles, H.T. (Chaplin Bros.) This rose was exhibited last year, when it received a Certificate, but this year we saw it in much better form, and it rightly obtained the premier award. The blooms are a good shape, very fragrant, and very freely produced; in fact, the plant is in bloom from June to September. The flowers are not liable to damage by rain. In color it is a warm shade of pink, flushed salmon. The plants I have are vigorous growers and fairly free of mildew, very good as a cut-back. A very desirable rose both for exhibition and garden purposes; has come to stay. In commerce.

Capt. Kilbee-Stuart, H.T. (Alex. Dickson & Sons.) A vigorous-growing rose, with massive, finely shaped, fragrant blooms; liable to damage by rain. The color is a rich dark crimson, thought by the judges to be an improved Edward Mawley, and I hope they are right, as it is the best crimson Hybrid Tea we have had for some time. The plant exhibited was of very vigorous growth and fairly free from mildew. To those who aim at large, perfectly shaped blooms, this is their rose. In commerce.

Venus, H.T. (Bees Ltd.) The raisers showed a very large stand of this charming variety, every bloom of which was perfect. It is one of those roses which when we have once seen, we want. A very vigorous grower with large, sweetly scented, perfectly formed blooms, very freely produced on stiff stems. Not liable to damage by rain. Color rich shell-pink, shaded gold. Foliage leathery, bright green, free from mildew. In commerce.

Capt. F. S. Harvey-Cant, H.T. (Frank Cant & Co.) A fine shaped rose of good habit. The massive blooms, very sweetly scented, are produced in great profusion on stiff stems. Color a glorious shade of rich salmon-pink, shaded scarlet, with golden yellow at base; stiff petals. Perhaps a little liable to damage by rain. Foliage reddish green, free from mildew. Growth very vigorous and branching. A good hardy rose, useful for exhibition and garden purposes. In commerce.

W. E. Wallace, H.T. (Hugh Dickson.) A good rose, of strong, upright habit of growth. The sweetly scented blooms, which are freely produced, are a good shape, with massive petals, and carried on long, upright stems. Perhaps liable to damage by rain. Color orange-buff. Foliage good, slightly touched with mildew. A good bedding rose, and one which the judges thought will displace Margaret Dickson Hamill. In commerce.

Florence M. Izzard, H.T. (S. McGredy & Son.) A very beautiful rose. Color rich yellow, which it retains well. The blooms are fairly large and of good form, but liable to be, perhaps, a little rough when fully expanded; deliciously scented—in fact, the judges were of unanimous opinion that the perfume was was identical to that grand old variety Maréchal Niel. Not liable to damage by rain. It is, undoubtedly, at its best in the half-open stage, when the petals recurve in a very delicate way. The foliage is a bright holly-green, shaded red; wood and spines bright red. The plant shown was of vigorous habit and free from mildew. A magnificent rose. In this rose the Pernetiana blood is almost entirely eliminated, and it is practically a pure Hybrid Tea.

The secondary award, a Certificate of Merit, was given to:

Mrs. Hornby-Lewis, H.T. (Elisha J. Hicks.) A vigorous-growing rose, perhaps best described as a glorified Mme. Ravary. The plant shown was of a free-branching habit, and free of mildew. It will make a pretty bedding rose, as it keeps its color well. In commerce.

Sovereign, Per. (B. R. Cant & Son.) A pretty rose, reminding one some-

what of Mme. Colette Martinet, but a very much better grower. The blooms are small, of a good shape, very sweetly scented, not liable to damage by rain. The color, as its name suggests, is a rich golden yellow, shaded red. The foliage is a dark, shiny green. A fairly vigorous grower, of a free branching habit, and a good bedder. In commerce.

Elsie Beckwith, H.T. (G. Beckwith & Son.) This is a very fine seedling (from *Ophelia* × *Mevrouw Dora van Tets*), of a vigorous, upright habit of growth. The very sweetly scented blooms, with large, bold, stiff petals, are produced on strong stems. Not liable to damage by rain. Color a rich glowing rosy pink. Foliage dark green, shaded red; wood dark red; very handsome. Not liable to mildew. Very good indeed as a cut-back. This is quite one of the best roses of the year, and a good all-round sort for garden, bedding, and under glass. It suggests a glorified Mrs. Charles E. Russell. In commerce.

Innocence, H.T. (Chaplin Bros.) A lovely, large (sometimes 5 inches in diameter), single-flowering white rose that opens well. The delicate wave of the petals, coupled with the golden stamens, makes it a very attractive variety. Like most of the singles, the perfume is not pronounced, but that does not matter. I have had it in my garden for some time, and with me it is a moderate grower. This will delight the lovers of single roses, and one can well imagine the pleasure a closely planted bed would give. In commerce.

Bessie Chaplin, H.T. (Chaplin Bros.) An enormous bloom of the William Shean type. Liable to damage by rain. Color bright pink, shaded brighter at edge of petals; scented. Free from mildew. A moderate-growing rose, best suited for exhibition purposes. In commerce.

Lady Roundway, H.T. (B. R. Cant & Sons.) Shows a medium-sized bloom of wonderful coloring—rich orange, flushed with pink; sweetly scented. Not liable to damage by rain. The plant exhibited was fairly vigorous, and free from mildew. I saw this rose growing in the raisers' nurseries the end of last July, and was greatly impressed with it. The only fault it has, if fault one may call it, is that the blooms are a little lacking in fullness. It was probably due to that fact that it did not receive the premier award. It is a delightful rose and one that will hold its own as a bedder for many a long day to come.

Alice Amos, Poly. (D. Prior & Son.) A very delightful Polyantha rose. The blooms, which are single, are carried in large trusses, reminding one of a dwarf American Pillar, but of a much brighter color. Not liable to be spotted by rain. The plant I have is, for a Polyantha, of very vigorous growth. The wood is dark red, almost thornless. An ideal bedder, and one of the best Polyanthas of recent years. In commerce.

Lady Verey, H.T. (Elisha J. Hicks.) A very pretty rose of good form, not liable to damage by rain; not very fragrant. Color a rich shell-pink; very beautiful in the bud stage; opens rather thinly. The plant shown was of good habit and free of mildew. A delightful bedding rose. In commerce.

Ruth, H.T. (Rev. J. H. Pemberton.) A fairly vigorous-growing rose, with large, sweetly scented blooms of a pointed globular form, very freely produced. Not likely to be damaged by rain. Color golden yellow, flushed coppery red. Foliage dark, shiny green, free from mildew. A fine bedding rose. In commerce.

J. G. Glassford, H.T. (Hugh Dickson.) A very large J. B. Clark type of bloom, with very high-pointed center. Liable to damage by rain. Color cherry-red that fades with age; moderately scented. Foliage light green, not liable to mildew. An exhibitor's rose. In commerce.

Harriet A. Easlea, Per. (S. McGredy & Son.) This rose carries us a step further with the "bicolors." Starting with Juliet, with her rough and tubby blooms, we have now got to the high-pointed-center stage—quite a new and

welcome break. True, the scented blooms of Harriet Easlea are perhaps on the thin side, but they last well, are carried on stiff, upright, thorny stems, and are not liable to damage by rain. Color, bright carmine, reverse of petals golden yellow—a remarkable contrast. Foliage bright holly-green, free from mildew. A good and interesting bedding variety.

Lord Allenby, H.T. (Alex. Dickson & Sons.) A very large rose, reminding one very much of Earl Haig but of a much better habit of growth. The sweetly scented blooms are a good shape, with enormous petals, and are liable to damage by rain. Color scarlet-crimson, shaded maroon. Foliage free from mildew. This is an exhibitor's rose. In commerce.

Chastity, H.T. (Frank Cant & Co.) This is a pillar rose, somewhat after the type of Mme. Alfred Carrière. The scented blooms, which are about 3 inches in diameter, are somewhat thin and open quite flat. They are produced in clusters of five or six and are not liable to damage by rain. The foliage and wood are a light green; quite free from mildew. A good acquisition. Awarded the Cory Cup.

Mrs. G. Heath, H.T. (S. McGredy & Son.) A bicolored rose, reminding one of an improved Independence Day. The color is yellow, shaded a reddish apricot, which lasts well. Not liable to damage by rain. Foliage dark, shiny green, shaded red; free from mildew. The plant exhibited was free and robust. A very effective rose, and one that will make a fine bedder.

Westfield Star, H.T. (Morse & Sons.) A fragrant rose somewhat of the Ophelia type, with medium-sized blooms. Color, paper-white, shaded cream. Liable to damage by rain. The plant exhibited was vigorous and free. A forcing and bedding rose. Mr. Morse told me it was a Polyantha seedling, and as such it is one of those vagaries hybridists encounter now and again. In commerce.

Vesuvius, H.T. (S. McGredy & Son.) A sweetly scented single rose, with large (often 4 inches across) blooms. Color a rich glowing velvety crimson; stamens bright golden, making the blooms, which are somewhat of a cupped form, most attractive. The petals are stiff and lasting, which is a good sign, as it tells one that the color, too, is not fleeting. Not liable to damage by rain. The plant was very vigorous, with slight traces of mildew. We have been having a fair number of single roses lately, and one is sometimes told that we have enough. There is plenty of room, however, for this one. (See Plate XVII.)

Arthur Cook, H.T. (S. McGredy & Son.) This is another of those dark, velvety, crimson-shaded deep purple roses the raisers are giving us; very sweetly scented. They are quite a new break, and will probably lead on to our having some of the old dark colors of the Prince Camille de Rohan type in the Hybrid Teas. The blooms are very shapely, and in the bud stage quite unique. Not liable to damage by rain. The plant exhibited was of very vigorous growth. Foliage olive-green, free from mildew. Altogether a great advance in the dark-colored Hybrid Teas, and apparently a variety suitable both for exhibition and garden purposes.

Nur Mahal, ("The fairy of the palace"), H. Musk. (Rev. J. H. Pemberton.) A bright crimson, semi-single rose of vigorous habit, reminding one very much of *Rosa Moyesii*. The musk-scented blooms are very freely produced in clusters on fairly stiff stems. The habit of the plant exhibited was free and branching, the foliage not showing any trace of mildew. It will make a good bedding rose, and apparently is well able to hold its own in a wet season.

In my opinion the best roses of the year are Florence M. Izzard, Lady Roundway, Arthur Cook, and Mrs. Henry Bowles.

The New Roses of All the World

AN EDITORIAL SURVEY

A SERIOUS effort is made to acquaint members with all new rose introductions. To promote this effort, catalogues and periodicals are scanned, and much direct correspondence conducted, though some introducers, both American and foreign, are either so careless or so ashamed of their new roses as to be unwilling either to answer respectful inquiries or to check the Official Record Card invariably sent "on suspicion."

Of the 120 roses below indexed and described, 34 are set forth, each prefixed by an asterisk (*), upon the definite data checked on the cards returned. Accuracy is guaranteed only in transcription of such data, but at least the flamboyant adjectives are eliminated. The index and descriptions are complete for 1922 roses, and for older roses not previously recorded.

INDEX OF NEW ROSES MENTIONED IN THE 1923 ANNUAL

- | | | |
|-------------------------------|------------------------------|---------------------------------|
| Admiration, 148. | Innocence, 145. | Phantom, 153. |
| Alice Amos, 145. | Jeanne Cabanis, 151. | Prince of Wales, 149. |
| Annie Laurie, 175. | J. G. Glassford, 145. | Princess Chika, 152. |
| Arthur Cook, 146. | Kathleen, 148. | Princess Nagako, 149. |
| Avalanche, 153. | Lady Inchiquin, 148. | Prince Yugala, 149. |
| Baronesse van Tuyl van | Lady Johnstone, 151. | Printemps Fleuri, 152. |
| Serooskerken, 154. | Lady Roundway, 145. | Radium, 153. |
| Bessie Chaplin, 145. | Lady Veray, 145. | R. G. Casson, 149. |
| Betty Uprichard, 148. | Leslie Pidgeon, 149. | Rosabel Walker, 149. |
| Bouquet d'Or, 153. | Linette, 151. | Rose Berkeley, 150. |
| Bride's Blush, 175. | Lord Allenby, 146. | Rosette Delizy, 152. |
| Capt. F. S. Harvey-Cant, 144. | Lord Charlemont, 149. | Rostelfe, 154. |
| Capt. Kilbee-Stuart, 144. | Louise Joly, 151. | Ruth, 145. |
| Chamisso, 154. | Lord Lambourne, 149. | S. A. Prince Youssef |
| Chastity, 146. | Lucie Nicolas Meyer, 151. | Kamal, 152. |
| Clara Curtis, 148. | Mabel Morse, 149. | Sceptre, 150. |
| Cl. H. V. Machin, 153. | Madeleine Pacaud, 151. | Sensation, 175. |
| Cl. Mrs. Aaron Ward, 148. | Madette, 151. | Simone Labbé, 154. |
| Commonwealth, 175. | Marguerite Carels, 151. | S. M. Gustave V, 152. |
| Comtesse Prozor, 150. | Mama Lamesch, 154. | Snowflake, 150. |
| Corlia, 148. | Mevrouw G. de Jonge van | Souv. de F. Bohé, 152. |
| Courtney Page, 148. | Zwynsbergen, 154. | Souv. de François Mercier, 152. |
| Denise Cassegrain, 150. | Midnight Sun, 154. | Souv. de Gabriel Luizet, 152. |
| Dewdrop, 148. | Mme. de Bauvoire, 151. | Souv. de H. A. Verschuren, |
| Diadem, 148. | Mme. François Graindorge, | 153. |
| Duchess of Marlborough, 150. | 152. | Souv. de Mme. H. Thuret, 153. |
| Elsie Beckwith, 145. | Mme. Gaston Mestreit, 152. | Souv. de Papa Calame, 153. |
| Emile Charles, 150. | Mme. Marie Eberlin, 152. | Souv. de R. B. Ferguson, 150. |
| Emmanuella de Mouchy, 151. | Mme. Schmitt, 152. | Sovereign, 144. |
| Fernand Dumay, 151. | Monette, 152. | Substitut Jacques Chapel, |
| Fiammetta, 151. | Mrs. Alfred West, 149. | 153. |
| Florence M. Izzard, 144. | Mrs. G. Heath, 146. | Sweetness, 150. |
| Francesca, 148. | Mrs. Henry Bowles, 144. | Therese Zeimet-Lambert, 154. |
| Galli-Curci, 175. | Mrs. H. L. Wettern, 149. | The Adjutant, 150. |
| Général Fetter, 151. | Mrs. Hornby-Lewis, 144. | Venus, 144. |
| Gladys Saavedra, 151. | Mrs. John Inglis, 149. | Vesuvius, 146. |
| Golden City, 153. | Mrs. J. Wylie, 149. | Vater Rhein, 154. |
| Gwen Nash, 153. | Mrs. Warren G. Harding, 153. | Waltham Crimmon, 150. |
| Harriet A. Easlea, 145. | Noella Virebent, 152. | Westfield Star, 146. |
| Hermann Neuhoft, 154. | Nur Mahal, 146. | W. E. Wallace, 144. |
| Honeymoon, 175. | Opaline, 153. | Yvan Misson, 153. |
| Humboldt, 175. | Papa Gouchault, 152. | Zaida, 153. |

GREAT BRITAIN

Admiration, H.T. (S. McGredy & Son, 1922.) Bloom large, full, perfectly shaped; soft pearly cream ground, heavily washed and shaded vermilion; moderate fragrance. Vigorous, bushy; free bloomer.

Alice Amos. See page 145.

Arthur Cook. See page 146.

Bessie Chaplin. See page 145.

**Betty Upprichard*, H.T. (A. Dickson & Sons, 1922.) Type, Ophelia. Bud medium size, long-pointed; flower large, full, open, semi-double to double, high-centered; delicate salmon-pink, reverse glowing carmine with coppery sheen and suffusion of orange; borne singly and several together, on long, strong stem; strong fragrance. Foliage abundant, large, leathery, glossy, light bronze-green. Few thorns. Vigorous, bushy, profuse and continuous bloomer from June to October; hardy. Gold Medal, National Rose Society.

**Captain F. S. Harvey-Cant*. See page 144.

**Captain Kilbee-Stuart*. See page 144.

Chastity. See page 146.

**Clara Curtis*, H.T. (A. Dickson & Sons, 1922.) Type, Gorgeous. Bud large, flower very large, full, very double, high-centered, very lasting; rich golden yellow; borne singly on medium long, strong stems; strong Maréchal Niel fragrance. Foliage abundant, large, leathery, dark green. Few thorns. Moderate grower, bushy, dwarf; free and continuous bloomer from June to September; hardy. Gold Medal, National Rose Society.

**Cl. Mrs. Aaron Ward*, Cl.H.T. (A. Dickson & Sons, 1922.) Sport of Mrs. Aaron Ward. Has all the characteristics of the parent, but is a climber.

Corlia, H.T. (Bees Ltd., 1923.) Flower terra-cotta; moderate fragrance. Foliage mildews. Vigorous. Certificate of Merit, National Rose Society, 1921.

Courtney Page, H.T. (S. McGredy & Son, 1922.) Flower very large, full, double, high-centered; scarlet-crimson, overlaid and shaded deeper crimson, most of the blooms show a deep crimson base, moderate fragrance. Vigorous; free and continuous bloomer. Gold Medal, National Rose Society, 1920.

Dewdrop, H.T. (S. McGredy & Son, 1923.) Flower of medium size; rich pale pink, passing to pale rose, strong fragrance. Vigorous, branching; abundant bloomer. Certificate of Merit, National Rose Society, 1921.

Diadem, H.T. (S. McGredy & Son, 1922.) Flower full, perfectly formed; deep crimson, heavily overlaid orange-crimson, suffused deep salmon and coppery yellow; moderate fragrance. Vigorous; profuse and continuous bloomer.

**Elsie Beckwith*. See page 145.

**Florence M. Izzard*. See page 144.

**Francesca*, H.T. (Pemberton, 1922.) Type, Pax. Bud small, long-pointed; flower medium size, open, single, lasting; apricot; borne in large spray on long stem; slight fragrance. Foliage abundant, large, leathery, disease-resistant. Few thorns. Very vigorous, upright; abundant and continuous bloomer from June to September; hardy.

Harriet A. Easlea. See page 145.

Innocence. See page 145.

J. G. Glassford. See page 145.

**Kathleen*, H.Musk. (Pemberton, 1922.) Type, Moonlight. Bud small; flower small, open, single, very lasting; blush-pink; borne in clusters on long stem; slight fragrance. Foliage abundant, large, leathery, dark green, disease-resistant. Few thorns. Very vigorous (6 feet high); profuse and continuous bloomer from May to November; hardy.

**Lady Inchiquin*, H.T. (A. Dickson & Sons, 1922.) Bud large, ovoid; flower



PLATE XVI. English Gold-Medal and Certificated Roses of 1922
 1, Capt. F. S. Harvey-Cant; 2, Mrs. Courtney Page; 3, Arthur Cook; 4, Venus;
 5, Harriet A. Easlea

(Photographs by courtesy of Mr. Courtney Page. See page 142.)

large, full, very double, high-centered, globular, very lasting; orange-vermilion; borne, singly and several together, on long, strong stem; slight fragrance. Foliage abundant, large, leathery, rich, glossy green, fairly disease-resistant. Many thorns. Very vigorous, upright, bushy; profuse and continuous bloomer from June to October; hardy. Gold Medal, National Rose Society.

Lady Roundway. See page 145.

Lady Verey. See page 145.

Lestie Pidgeon, H.T. (Hugh Dickson, 1922.) Flower very lasting, creamy yellow, flushed with pink, with a greenish line at the base of petals. Vigorous. Certificate of Merit, National Rose Society, 1921.

Lord Allenby. See page 146.

Lord Charlemont, H.T. (S. McGredy & Son, 1922.) Bud very long-pointed; flower large, full, high-centered, perfectly shaped; clear crimson, deepening to carmine-crimson; strong fragrance. Vigorous; free bloomer.

Lord Lambourne, H.T. (S. McGredy & Son, 1922.) Type, Sunstar. Flower enormous, perfectly formed, very lasting; golden buff, base of petals old burnished gold, shaded strawberry-pink. Blooms from July to November.

Mabel Morse, H.T. (S. McGredy & Son, 1922.) Flower very large; clear bright golden yellow, without shading, borne on long, strong stem; moderate fragrance. Foliage bright glossy green, disease-resistant. Few thorns. Very free bloomer. Gold Medal, National Rose Society.

**Mrs. Alfred West*, H.T. (Frank Cant & Co., 1922.) Bud very large, long-pointed, deep salmon-pink; flower very large, full, high-centered, double, very lasting; salmon-pink; borne, several together, on long, strong stem; strong fragrance. Foliage abundant, large, leathery, rich glossy green, disease-resistant. Few thorns. Vigorous (2½ to 3 feet); bushy, continuous bloomer, hardy.

Mrs. G. Heath. See page 146.

Mrs. Henry Bowles. See page 144.

Mrs. H. L. Wettern, H.T. (S. McGredy & Son, 1922.) Flower very large, globular, high-centered; vivid pink, particularly bright when blooms are half open—does not blue with age; moderate fragrance. Vigorous; blooms from July to November. Certificate of Merit, National Rose Society, 1921.

Mrs. Hornby Lewis. See page 144.

Mrs. John Inglis, H.T. (S. McGredy & Son, 1922.) Flower rich cerise-scarlet. Free bloomer from July to November.

Mrs. J. Wyllie, H.T. (H. Dickson, 1923.) Flower silvery blush-pink. Blooms from July to November.

Nur Mahal. See page 146.

Prince of Wales, H.T. (W. Easlea & Son, 1922.) Bud fine; flower very large, elongated; vivid cherry-red, shaded scarlet; borne on long, strong stem; moderate fragrance. Vigorous, upright. Awarded Clay Challenge Cup, 1921.

**Prince Yugala*, H.T. (Frank Cant & Co., 1923.) Bud medium size, long-pointed; flower medium size, full, double, high-centered, very lasting; almost black, with velvety sheen; borne singly on average stem; slight fragrance. Foliage medium size, glossy green, disease-resistant. Few thorns. Moderate grower (2 feet), bushy habit; continuous bloomer from June to October; hardy.

**Princess Nagako*, H.T. (Pemberton, 1922.) Bud small, globular; flower small, cupped, semi-double; fiery red, shaded yellow; borne singly on short stem; slight fragrance. Foliage sufficient, small, glossy, light green, disease-resistant. Many thorns. Moderate grower, dwarf; continuous bloomer; hardy.

R. G. Casson, H.T. (B. R. Cant & Sons, 1923.) Flower well formed, rose and copper shades; moderate fragrance. Blooms from July to November.

**Rosabel Walker*, H.T. (Frank Cant & Co., 1922.) Bud large, long-pointed; flower large, open, very double, very lasting; brilliant velvety crimson; borne

singly on average stem; moderate fragrance. Foliage abundant, leathery, medium size, rich green, disease-resistant. Many thorns. Very vigorous, bushy; abundant and continuous bloomer from June to October; hardy. Certificate of Merit, National Rose Society; Award of Merit, Royal Hort. Society.

Rose Berkeley, H.T. (S. McGredy & Son, 1923.) Bud long-pointed; flower high-centered, bright yellow; moderate fragrance. Blooms continuously.

Ruth. See page 145.

Sceptre, Per. (S. McGredy & Son, 1923.) Flower high-centered, bright flame-color, shaded with orange at the base, reverse yellow. Growth upright; blooms from June to November.

**Snowflake*, H.W. (Frank Cant & Co., 1922.) Type, Minnehaha. Bud medium size, ovoid; flower medium size, open, double, very lasting; pure white; borne in cluster on long, strong stem; strong fragrance. Foliage abundant, medium size, glossy dark green, disease-resistant. Few thorns. Climbing habit; profuse, intermittent bloomer during July and August. Gold Medal, National Rose Society; Cory Cup for best climber sent out in 1922.

**Souvenir de R. B. Ferguson*, H.B. (Ferguson, 1922.) Constance × unnamed seedling. Type, Arthur R. Goodwin. Bud large, globular, cerise and rose-pink; flower large, full, double, cupped, very lasting; color varies between shell-pink and apricot, sometimes deeply shaded with rich rose-pink and cerise, back of petals rich apricot, deep orange-yellow base; slight fragrance. Foliage sufficient, medium size, rich glossy green, mildews. Many thorns. Vigorous (2 feet high), upright, bushy, compact; continuous bloomer from May to October; tips freeze. First-Class Certificate, Royal Caledonian Horticultural Society, 1921; Award of Merit, National Rose Society, 1921.

Sovereign. See page 144.

Sweetness, H.T. (S. McGredy & Son, 1923.) Flower medium size, perfect form; soft intense rose, shaded with scarlet; moderate fragrance. Blooms from July to November.

**The Adjutant*, H.T. (Pemberton, 1922.) Bud large, long-pointed; flower large, high-centered, very lasting; vermilion-red; borne erect on long stem; strong fragrance. Foliage leathery, dark green, disease-resistant. Few thorns. Vigorous, upright; continuous bloomer from June to November; hardy.

Venus. See page 144.

Vesuvius. See page 146.

Waltham Crimson, H.T. (Chaplin Bros., 1922.) Flower medium size, deep crimson. Vigorous, bushy; abundant and continuous bloomer.

Westfield Star. See page 146.

W. E. Wallace. See page 144.

FRANCE

Comtesse Prozor, H.G.† (Nabonnand, 1922.) *R. gigantea* × *Comtesse de Bouchard* (Nois.) Flower medium size, salmon-rose, with reverse of petals coral-red. Foliage glossy, disease-resistant. Vigorous, climbing, free bloomer.

Denise Cassegrain, Poly. (Grandes Roseraies, 1922.) Flower snow-white, very double; borne in cluster of 30 to 40; strong fragrance.

Duchess of Marlborough, H.T. (Nabonnand, 1922.) *Beaute de Lyon* × seedling of Jonkheer J. L. Mock. Flower very large, full, globular; brilliant lilac-rose, reverse of petals carmine-crimson. Very vigorous.

Emile Charles, Per. (Bernaix, 1922.) Sport of Mme. Edouard Herriot. Bud fiery red, shaded golden yellow; flower coral-red, edges eglantine pink, shaded crushed strawberry, flame color at base. Vigorous; continuous bloomer.

†This abbreviation is used for Hybrid Gigantea, a new class of roses obtained by using *Rosa gigantea* (*R. odorata gigantea*) as one of the parents.

Emmanuella de Mouchy, H.G. (Nabonnand, 1922.) *R. gigantea* × Lady Waterlow (H.T.) Flower semi-double, globular; delicate transparent rose-pink. Very vigorous, climbing.

**Fernand Lumay*, H.T. (Buatois, 1922.) Mrs. Aaron Ward × unnamed seedling. Type, Mrs. Aaron Ward. Bud medium size, ovoid, nankeen-yellow, opens well; flower large, very double, camellia-like form, very lasting; apricot-nankeen-yellow, edges of petals milk-white; borne singly on medium length stems; moderate fragrance. Foliage bronze-green, disease-resistant. Few thorns. Moderate grower, bushy, compact; continuous bloomer; hardy.

Fiammetta, H.G. (Nabonnand, 1922.) *R. gigantea* × Margaret Molyneux (H.T.) Bud very long pointed, cadmium-yellow; flower large, single, warm amber-yellow, with streaks of cadmium; strong fragrance. Foliage dark glossy green. Few thorns, hooked. Very vigorous, climbing.

Général Fetter, H.T. (Walter, 1922.) Jonkheer J. L. Mock × Luise Lilia. Bud long-pointed, opens well in all weather; flower well formed, very full; carmine-purple, pure and shining; borne singly on long, strong stem.

Gladys Saavedra, H.T. (Nabonnand, 1922.) Flower large, full, globular; rosy peach-blossom-pink, reverse of petals rose-pink. Vigorous.

Jeanne Cabanis, H.T. (Guillot, 1922.) Bud coral-red; flower large, very full, high-centered, very lasting; bright lasting rose-carmine, reverse of petals silvery, center coppery rose; borne singly. Foliage bronzy green, disease-resistant. Vigorous; hardy.

Lady Johnstone, H.G. (Nabonnand, 1922.) *R. gigantea* × Beaute Lyonnaise (Cl.T.) Bud long-pointed, cadmium-yellow; flower large, single; reddish pink, moderate fragrance. Foliage glossy green. Few thorns. Very vigorous, climbing.

Linette, Poly. (E. Turbat & Co., 1922.) Bud reddish apricot; flower large for the class; shrimp-carmine-pink, passing to tender rose-pink on opening; borne in cluster of 6 to 10. Foliage rich green.

**Louise Joly*, Per. (Buatois, 1922.) Mme. Edouard Herriot × unnamed seedling. Type, Mme. Edouard Herriot. Bud large, long-pointed, coral-red, shaded shrimp-pink; flower large, double, cupped, lasting; lake, tinted salmon and yellow; borne singly, on medium strong stem; moderate fragrance. Foliage glossy green, disease-resistant. Few thorns. Vigorous, upright, bushy; profuse and continuous bloomer; hardy.

**Lucie Nicolas Meyer*, H.T. (Gillot, 1922.) Jonkheer J. L. Mock × unnamed seedling. Type, Jonkheer J. L. Mock. Bud large, ovoid; flower large, double, globular, very lasting; dark pink, lighter at the edges; borne, singly and several together, on strong stem; moderate fragrance. Foliage glossy green, disease-resistant. Few thorns. Vigorous, bushy; blooms continuously; tips freeze. Silver Gilt Medal, Société d' Horticulture du Doubs.

Madeleine Pacaud, H.T. (Chambard, 1922.) Bud long-pointed, bright coppery rose; flower very large, cupped; silvery rose, tinted salmon, reverse coppery rose, large coppery yellow stamens; borne on long, strong stem; moderate fragrance. Foliage dark, glossy green. Few thorns. Very vigorous.

Madette, Per. (Guillot, 1922.) Bud medium size, long-pointed, dark nasturtium-red; flower medium size; coppery orange-pink; borne in cluster. Foliage bronzy green. Vigorous; continuous bloomer from May to October; hardy.

Marguerite Carels, Cl.H.T. (Nabonnand, 1922.) Reine des Neiges × General MacArthur. Bud long-ovoid, Paul Neyron-carmine; flower large, full, globular; Paul Neyron-pink, center shaded deeper; borne on long, strong stem. Foliage dark green. Thorns few. Vigorous, climbing; profuse bloomer.

Mme. de Bauvoire, H.T. (Schwartz, 1922.) Mme. Vittoria Gagnière × Lady Ashtown. Bud long-pointed; flower large, full, well-formed; pinkish white, center pale pink. Foliage rich glossy green. Vigorous.

Mme. François Graindorge, Poly. (Grandes Roseraies, 1922.) Bud perfectly formed; flower large; dark reddish pink, mixed with reddish magenta, base of petals slightly tinged Persian lilac; borne in cluster of 40 to 50. Foliage glossy green, disease-resistant. Vigorous.

Mme. Gaston Mestreit, Poly. (Soupert & Notting, 1922.) Jeanny Soupert × Katharina Zeimet. Flower very delicate flesh-white, in cluster of 250 to 300. Very vigorous; continuous bloomer.

Mme. Marie Eberlin, H.T. (Walter, 1922.) Comtesse Mélanie de Pourtales × Captain Christy. Flower very large, full, globular; cream passing to white, base of petals light yellow. Vigorous, bushy; profuse bloomer.

Mme. Schmitt, H.T. (Schwartz, 1922.) Flower large, full; salmon-pink, shaded peach-blossom-pink. Foliage purplish green. Vigorous.

Monette, Poly. (E. Turbat & Co., 1922.) Phyllis × unnamed seedling. Bud and flower clear fiery red, passing to rose, with many streaks of white; borne in cluster of 60 to 100. Foliage rich green. Few thorns. Dwarf.

Noella Virebent, H.G. (Nabonnand, 1922.) *R. gigantea* × Archiduc Joseph (T.) Bud long-pointed, tender peach-blossom-pink; flower large, well formed, semi-double; satiny flesh-pink, center brighter; moderate fragrance. Foliage dark glossy green. Few hooked thorns. Very vigorous.

Papa Gouchault, Mult. (E. Turbat & Co., 1922.) Flower of good form, medium size, double, lasting; pure crimson-red, with no violet tinge (when forced very bright cardinal-red); borne in cluster of 10 to 20. Foliage bright green. Very vigorous, climbing.

Princess Chika, H.T. (Nabonnand, 1922.) Flower very large, full, of elegant form; brilliant red with dark reflexes. Vigorous; very continuous bloomer.

Printemps Fleuri, Mult. (E. Turbat & Co., 1922.) Flower large, peony-shaped; brilliant purple, passing to carmine-rose; borne in cluster of 10 to 15. Foliage glossy dark green. Blooms very early.

Rosette Delizy, H.T. (Nabonnand, 1922.) Flower large, full, well-formed; cadmium-yellow, with apricot reflexes, outer petals dark carmine. Very vigorous; profuse bloomer.

S. A. Prince Youssouf Kamal, H.P. (Nabonnand, 1922.) Souvenir de Mme. Chedane Guinoisseau × Ulrich Brunner. Bud long-pointed, deep crimson; flower very large, semi-double; crimson, with brilliant scarlet streaks; moderate fragrance. Thorns few. Very vigorous; profuse bloomer.

S. M. Gustave V, Cl.H.T. (Nabonnand, 1922.) Reine des Neiges × Avoca. Bud long-pointed, brilliant crimson; flower very large, semi-double, perfect form, cupped, lasting; cochineal-carmine, reflexes of petals crimson, moderate fragrance. Foliage dark glossy green. Few thorns. Very vigorous.

Souvenir de F. Bohé, H.T. (Chambard, 1922.) Willowmere × unnamed seedling. Bud long-pointed, coppery salmon; flower large, cupped; orange-salmon without any shading; borne on long, strong stem. Foliage bronzy green, disease-resistant. Few thorns. Vigorous, upright; profuse bloomer.

Souvenir de François Mercier, H.T. (Laperriere, 1923.) Sport of Antoine Rivoire. Bud long-pointed; flower large, camellia-shaped; light coppery rose, deeper at edge; generally borne singly on long, strong stem; moderate fragrance. Foliage abundant, light green. Vigorous, upright. Special Mention and Diploma at Exposition Coloniale de Marseille.

Souvenir de Gabriel Luizet, H.T. (J. Croibier & Son, 1922.) Lyon Rose × seedling of Mme. Mélanie Soupert. Bud ovoid, opens well; flower very large, full; sulphur-yellow, slightly shaded salmon, passing to deep rich yellow on opening, and straw-yellow with age; generally borne singly on long, strong stem. Foliage dark green. Very vigorous, branches straight, slightly diverging. Certificate of Merit and Gold Medal, Société Lyonnaise d'Horticulture.



PLATE XVII. The English 1922 Certificated Rose, *VESUVIUS*
(Photograph by courtesy of Mr. Courtney Page. See page 146.)

Souvenir de H. A. Verschuren, H.T. (Verschuren, 1922.) Golden Ophelia × unnamed Sunburst seedling. Bud very long-pointed, opens well; flower very large, full, perfectly formed; cadmium-yellow, passing to orange-yellow; borne singly on long stem; moderate fragrance. Foliage disease-resistant. Vigorous, bushy; profuse bloomer. Gold Medal and Prize of Honor from Queen of Holland at International Exposition of Rotterdam; Gold Medal at Spa.

Souvenir de Mme. H. Thuret, Per.-H.T. (Texier; intro. by Nabonnand, 1922.) Reine des Neiges × Lyon Rose. Bud ovoid, perfect shape; flower very large, cupped; tender salmon-rose, center shrimp-red, stamens chrome-yellow. Foliage rich green. Thorns few. Vigorous; very hardy.

Souvenir de Papa Calame, H.T. (Chambard, 1922.) Sport of Jonkheer J. L. Mock. Bud very long-pointed; flower large; rose-carmine, reverse of petals silvery rose, suffused salmon. Vigorous, branching; profuse bloomer.

Substitut Jacques Chapel, H.T. (Bernaix, 1922.) Mme. Mélanie Soupert × Lyon Rose. Flower peach-blossom-pink, rose-pink at edges of petals, base shaded citron-yellow. Vigorous, upright, bushy; profuse bloomer.

Yvan Misson, Poly. (Soupert & Notting, 1922.) Jeanny Soupert × Katharina Zeimet. Flower peach-blossom-pink, borne in cluster of 200 to 250. Profuse and continuous bloomer.

UNITED STATES

Annie Laurie. See page 175.

Bride's Blush. See page 175.

Cl. H. V. Machin, Cl.H.T. (Howard & Smith, 1922.) Sport of H. V. Machin. Like H. V. Machin in everything except growth.

**Commonwealth*. See page 175.

Galli-Curci. See page 175.

**Honeymoon*. See page 175.

**Humboldt*. See page 175.

Mrs. Warren G. Harding, H.T. (A. N. Pierson, 1922.) Sport of Columbia. Has all the characteristics of the parent but is very much darker in color.

**Phantom*, H.T. (Towill, 1922.) Joseph Hill × My Maryland seedling × Lady Hillingdon. Bud medium size, long-pointed, coppery yellow; flower medium size, semi-double, high-centered, lasting; coppery yellow, with lighter center; borne singly on medium-length stems; moderate fragrance. Foliage abundant, leathery, dark glossy green.

Sensation. See page 175; also colored Frontispiece.

NEW ZEALAND

Avalanche, H.T. (Lippiatt, 1922.) Flower very large, full, well-formed; pale, creamy white, with deeper center. Vigorous, upright.

Bouquet d'Or, H.T. (Lippiatt, 1922.) Bud intense yellow; flower of beautiful shape, light golden yellow. Very vigorous.

Golden City, H.Per. (Lippiatt, 1922.) Rayon d'Or × Frau Karl Druschki. Bud golden yellow; flower well-shaped, light buff. Robust, branching habit; continuous bloomer.

Gwen Nash, Cl.H.T. (Clark; intro. by Lippiatt, 1922.) Flower large, semi-double; soft shell-pink, deepening toward the edges. Strong climber.

Opaline, H.Per. (Lippiatt, 1922.) Louise Catherine Breslau × Frau Karl Druschki. Flower large, well-formed; pale pink, shaded carmine and old gold. Vigorous; very free bloomer.

Radium, Per. (Lippiatt, 1922.) Beaute Lyonnaise × Captain Hayward. Flower well formed; carmine, shaded coppery red. Vigorous, upright; free.

Zaida, H.Per. (Lippiatt, 1922.) Flower large, perfectly formed; pale coral-pink. Vigorous.

GERMANY

**Chamisso*, Lam.† (Lambert, 1922.) Geheimrat Dr. Mittweg × Tip-Top. Type, Trier. Bud small, globular, yellowish red; flower medium; semi-double, lasting; flesh-pink, center yellowish white; borne in cluster on long stem; moderate fragrance. Foliage bronze-green. Few thorns. Vigorous, trailing; profuse and continuous bloomer; hardy.

**Hermann Neuhoff*, H.T. (Neuhoff; intro. by W. Kordes Sons, 1923.) Sport of General-Superior Arnold Janssen, of uniform blood-red color; habit otherwise as parent.

**Mama Lamesch*, H.T. (Lambert, 1922.) Frau von Groote × Mme. Edouard Herriot. Type, La France. Bud large, ovoid; flower large to very large, full, double, high-centered, very lasting; orange-rose, center deeper (the color of Mme. Edouard Herriot), back of petals reddish rose; moderate fragrance. Foliage bronze-green, disease-resistant. Very vigorous (2 to 3 feet high), upright, compact; blooms continuously; hardy.

**Rostelfe*, H.T. (Tantau, 1922.) Sport of Chateau de Clos Vougeot. Bud medium size, ovoid; flower medium size, full, double, globular, lasting; scarlet, overlaid and mottled maroon, like Chateau de Clos Vougeot; borne, several together, on long stem. Foliage dark bronzy green. Vigorous, upright; free, intermittent bloomer. An upright-growing Chateau de Clos Vougeot.

**Therese Zeimet-Lambert*, H.T. (Lambert, 1922.) Richmond × Mrs. Aaron Ward. Type, Killarney. Bud large, long-pointed; flower large, full, double, high-centered; deep rose, with yellow ground, orange base; borne singly on long stem; strong fragrance. Foliage, bronze-green, disease-resistant. Few thorns. Vigorous, upright; intermittent bloomer; hardy.

**Vater Rhein*, H.T. (H. Kiese & Co., 1922.) Kynast × unnamed seedling. Type, Hadley. Bud medium size, ovoid; flower large, double; very dark red; borne singly on long stem; strong perfume. Vigorous, upright; free and intermittent bloomer.

HOLLAND

**Baronesse van Tuyl van Serooskerken*, H.T. (M. Leenders & Co., 1923.) Jonkheer J. L. Mock × Mme. Mélanie Soupert. Bud very large, long-pointed; flower very large, semi-double; rose and lilac-white, red and apricot at base. Foliage glossy green. Very vigorous, upright. Continuous bloomer.

**Mevrouw G. de Jonge van Zwynsbergen*, H.T. (M. Leenders & Co., 1923.) Mme. Mélanie Soupert × George C. Waud. Bud globular; flower very large, full; pale flesh-color, center flesh-pink and salmon; borne singly on long stem. Foliage sparse, light green. Very vigorous, compact; profuse bloomer.

GRAND DUCHY OF LUXEMBOURG

**Simone Labbé*, H.T. (Ketten Bros., 1922.) Le Progres × Lady Greenall. Type, Lady Greenall. Bud large, long-pointed; flower very large, full, double, lasting; apricot-yellow, passing to clear saffron-yellow; borne singly on long stem; strong fragrance. Foliage glossy, bronze-green, disease-resistant. Few thorns. Vigorous, bushy; free and continuous bloomer.

AUSTRALIA

**Midnight Sun*, H.T. (Grant; intro. by Kershaw, 1921.) Star of Queensland × Red-Letter Day. Type, Red-Letter Day. Bud large; flower large, open, semi-double, very lasting; deep maroon; slight fragrance. Foliage leathery, disease-resistant. Vigorous, upright, dwarf (4 to 5 feet); continuous bloomer. First-Class Certificate, National Rose Society, N. S. W.

†An abbreviation for Lambertiana, a new class of everblooming climbers originated by Peter Lambert, of Trier, Germany.

One Hundred and Twenty Roses Described and Recorded

By CHARLES E. F. GERSDORFF

EDITOR'S NOTE.—What follows is much more important than at first appears. Mr. Gersdorff has critically and accurately considered 121 different roses, grown under equal conditions, and he here reports a standardized description and gives detailed bloom information. No catalogue published anywhere gives amateurs so good an opportunity to choose intelligently.

THESE records have been made, mainly for my own information, and as a guide to follow for recommending roses for the making of rose-gardens in localities with climatic and soil conditions similar to those of the District of Columbia. However, they should not be considered as a final judgment on any particular variety. Some roses do better and worse elsewhere.

The soil in which my roses were grown varies from a loose, sandy loam to a stiff clay. Fertilization was kept down to a minimum in order that the plants could show their abilities to perform under conditions as nearly similar to those that might be met with in an ordinary unpretentious garden, where neglect is often the rule. Except for an occasional dressing of bone-meal, about once in three years, fertilization with liquid sheep- or other manure (often with small amounts of ammonium sulphate added) was but incidental, since this was mainly applied for the benefit of my gladioli which were invariably grown among my roses.

Cultivation was not attempted, owing to the presence of a persistent neighborhood pest—stray cats—which delight in digging close to the plants in the loose soil, but was obviated to some extent by mulching with the spent manure used in the preparation of the liquid fertilizer. Weeds were removed periodically by hand picking.

No protection was given during the winter.

Pruning consisted mainly in removing dead and weak wood and cutting back of long branches to prevent whipping during the winter, though, generally, the first year after planting,

hard pruning was resorted to in order to force the production of a strong root system.

Needless to say, no elaborate preparation of the soil of the rose-beds was undertaken. It consisted chiefly of spading into the soil on hand, a fair quantity of dried manure and allowing same to settle before planting.

Both budded and own-root stock of various sizes were tried, but not often both with the same variety. Except as noted, all first-year entries are the years in which the stock was planted.

SIGNIFICANCE OF ABBREVIATIONS AND CITATION MARKS.

*Sandy loam soil. **Clay loam soil. ***Clay. Br., Bourbon; C., China; Cl.H.T., Climbing Hybrid Tea; Cl.T., Climbing Tea; C.-T., China-Tea; H.Mult., Hybrid Multiflora; H.N. Hybrid Noisette; H.T., Hybrid Tea; H.P., Hybrid Perpetual; HSB., Hybrid Sweet Briar; H.W., Hybrid Wichuraiana; Per., Pernetiana; Poly., Dwarf Polyantha; T., Tea; T.-Poly., Tea-Polyantha; W., Wichuraiana; B., Budded; and OR., Own Root.

Alexander Hill Gray, T. ** Stock two year-old greenhouse-grown when planted. Medium large, fine form, full, tea fragrance, long stem. Fine leathery foliage, sufficient. Medium height, spreading growth, hardy. Clear deep yellow.

Year	Av. blooms per plant (3 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918.....	OR	0	0	0	0	0	1	3	0	4
1919.....	OR	1	3	5	9	10	6	1	0	35
1920.....	OR	0	4	7	14	2	8	1	0	36
1921.....	OR	1	3	6	17	1	10	2	1	42

American Beauty, HP.*** Stock, ten-year-old established plant when records were started. Medium to large size, full, fair to fine form, quite fragrant, color dulls badly in wet weather, medium to long stems. Foliage subject to mildew, plentiful. Growth very vigorous, bushy; hardy. Crimson, often purplish crimson to dull purple tones.

Year	Number of blooms per plant									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918....	OR	0	58	2	1	0	1	1	0	63
1919....	OR	0	68	35	3	11	7	2	0	126
1920....	OR	0	63	82	1	4	4	0	0	154
1921....	OR	1	75	93	0	6	7	3	1	186
1922....	OR	23	3	45	4	6	9	2	9	104

Bessie Brown, HT.** Stock, two-year-old greenhouse-grown when planted. Fine form, full, large to extra large, fine fragrance, medium long stems. Good foliage, sufficient. Growth strong; hardy. Soft ivory-white, very lightly blushed in cool weather.

Year	Av. blooms per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1911.....	OR	0	1	9	29	23	16	5	1	84
1912.....	OR	0	0	15	33	14	22	8	3	196

Betsy van Nes, Poly.** Stock, one-year-old greenhouse-grown when planted. Small, semi-double, in clusters, short stems. Foliage fair, sparse. Growth weak; hardy. Light red which fades badly.

Year	Av. blooms per plant (3 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1919....	OR	0	0	3	0	2	0	0	0	5
1920....	OR	0	1	29	3	6	5	2	0	46
1921....	OR	0	9	43	34	22	16	9	8	144

Discarded.

Betty, HT.*** Stock, two-year-old field-grown when planted. Medium large, good form, semi-double, fragrant, on long stems. Foliage

healthy, plentiful. Growth medium. Coppery rose shaded yellow. Hardy.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	1	1	2	0	0	4
1919.....	OR	0	3	6	7	2	3	5	0	0	26
1920.....	OR	1	8	10	4	0	4	6	0	0	33
1921.....	OR	3	4	9	10	1	3	2	4	1	37

Blumenschmidt, T.* Stock, two-year-old greenhouse-grown when planted. Small to medium size, full good form, tea fragrance, medium stem. Fine foliage, sufficient. Strong spreading growth; hardy. Clear light yellow.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	2	6	5	3	1	1	0	18
1919.....	OR	0	1	1	8	10	7	3	1	0	31
1920.....	OR	1	2	10	6	7	5	1	3	1	36

Blush Rambler, H. Mult.* Stock, eight-year established plant when records were started. Small, double in small clusters or sprays, old flowers shed petals, magnolia fragrance, stems short to long. Good plentiful foliage which is favored by the tent caterpillar, but since new growth is made constantly, the plant always shows a fair amount of foliage. Growth extremely vigorous and slender. Should be good for covering stumps and for the wild-flower garden. Flesh-pink, opening to flesh-white with orange stamens.

Year	Blooming period per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	May 9 to 20. More than 300 clusters.									
1919.....	OR	May 11 to 30. Very profuse in bloom.									
1920.....	OR	May 15 to June 3. Very profuse in bloom.									
1921.....	OR	May 3 to 20. Very profuse in bloom.									

Cardinal, HT.*** Stock, two-year-old field-grown when planted. Good form, full, medium large, very fragrant, long stems. Good foliage, sufficient, slight mildew. Growth strong; hardy. Clear cardinal-red.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	2	1	9	6	1	0	19
1919.....	OR	0	6	9	6	1	8	3	1	0	34
1920.....	OR	0	5	12	7	2	4	3	0	0	33
1921.....	OR	0	4	16	9	4	5	4	2	0	44

Cécile Brunner, Poly.* Stock, two-year-old greenhouse-grown when planted. Small, singly and in small sprays, double, fine form, slight fragrance, medium to long stems. Fine foliage, plentiful. Growth vigorous, bushy, somewhat spreading; hardy. Bright rosy pink, opening lighter.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	1	1	2	9	1	2	0	16
1919.....	OR	0	1	3	2	13	2	4	0	0	25
1920.....	OR	0	0	5	6	20	4	3	1	1	40
1921.....	OR	3	18	9	23	8	9	0	10	2	82

Childs' Jewel, HT.* Stock, fifteen-year established plant when records were started. Good to fine form, semi double to double, small to medium size, variable in color, tea fragrance, medium to medium-long stems. Fine foliage, plentiful. Growth slender bushy, spreading; roots hardy, top growth generally kills to ground. Color coppery yellow and orange blended strawberry-pink, coppery rose and canary-yellow, some flowers dark yellow, dark rose, or light yellow in effect.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	13	8	1	9	15	6	0	0	52
1919.....	OR	0	9	8	2	11	3	2	2	0	37
1920.....	OR	0	12	10	3	2	5	1	6	1	40

Cleveland, HT.** Stock, two-year-old field-grown when planted. Large, full, fine form, fragrant, medium-long stems. Fine foliage, sufficient. Growth medium to poor; only fair in hardiness. Rose flushed with reddish copper and coppery yellow.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1920†....	B	0	1	2	1	0	3	2	1	0
1921†....	B	0	0	1	2	1	1	2	0	0

†Winter-killed to ground ‡Discarded.

Cl. Cécile Brunner, Poly.** Stock two-year-old field-grown when planted. Full, small, singly and in small sprays, good form, fragrant, long stems. Fine foliage, plentiful. Growth very rapid, slender; Hardy. Clear pink to lighter when fully open. Fine for arches and fences.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918....	OR	0	0	0	3	6	4	1	1	1
1919....	OR	1	5	31	22	17	11	9	19	1
1920....	OR	0	5	6	1	25	4	4	0	0
1921....	OR	4	19	46	9	30	3	5	34	6

Climbing Killarney, HT.** Stock, two-year-old greenhouse-grown when planted. Large to very large, fine form, semi-double, fragrant, long stems. Fine foliage, sometimes slightly mildewed, sufficient. Growth very vigorous; hardy. Clear rich pink.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911....	OR	0	0	0	0	0	1	3	1	0
1912....	OR	1	5	17	19	3	6	2	0	0
1913....	OR	0	7	12	11	9	7	6	1	0

Climbing Wootton, HT.* Stock, fifteen-year-old established plant when records were started. Medium to very large, double, fair to fine form, singly and in clusters up to six, very fragrant, medium to very long stems. Fine foliage, plentiful, slight spot. Growth

very vigorous, bushy; hardy. Rich crimson-scarlet to rosy crimson or deep rose, according to number of blooms and time of blooming.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918..	OR	0	327	6	0	0	0	12	6	0
1919..	OR	0	246	1	0	0	0	219	5	0
1920..	OR	0	460	43	0	0	0	125	4	0
1921..	OR	1	*9	0	0	0	0	7	10	2
1922..	OR	12	600	38	2	1	1	6	28	12

*Most of early bloom destroyed in bud by late frost.

Clio, HP.* Stock, eight-year-old established plant when records were started. Good form but balls badly in wet weather, double, extra large, slight fragrance, medium stems. Good foliage, plentiful. Growth vigorous bushy; hardy. Flesh-pink, tinted deeper.

Year	Number of blooms per plant									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918....	OR	0	28	0	0	0	0	0	0	0
1919....	OR	0	28	13	0	0	0	0	0	0
1920....	OR	0	23	5	0	0	0	0	0	0
1921....	OR	0	29	15	0	0	0	0	0	0

Clotilde Soupert, Poly.* Stock, fifteen-year-old established plant when records were started. Singly and in small clusters, fair to good form, buds balling in wet weather, medium to large, full, slightly fragrant, medium to medium-long stems. Fine foliage, plentiful. Growth vigorous, bushy; hardy. White with rose-pink center.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918....	OR	0	30	19	8	9	23	8	6	1
1919....	OR	0	82	3	10	10	10	27	7	0
1920....	OR	0	57	20	13	24	11	18	0	0

Col. R. S. Williamson, HT.* Stock, two-year field-grown when planted. Large to very large, double, fine form, very fragrant, long stem. Fine foliage but sparse. Growth medium;

hardy. Light pink blended flesh and cream.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	1	0	1	0	1	1	0	0	4
1919.....	OR	0	1	1	9	3	4	2	1	0	21
1920.....	OR	1	5	4	4	3	14	1	2	0	33
1921.....	OR	0	7	10	3	0	5	3	2	1	31

Columbia, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Full, fine form, large to very large, tea fragrance, medium to long stems. Fine foliage, sufficient. Growth vigorous; hardy. Brilliant rose-pink.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	B	0	0	1	3	1	2	0	0	0	7
	OR	0	0	0	1	1	0	2	1	0	5
1920.....	B	0	0	1	2	2	2	1	1	0	9
	OR	0	0	2	2	2	2	2	3	1	11
1921.....	B	0	1	4	5	6	5	3	2	1	30
	OR	0	2	8	7	8	5	3	3	0	36

Comte G. de Rochemur, HT.* Stock, 3-inch pot, greenhouse-grown when planted. Good form, double, medium size, fragrance, and stem. Fine foliage, sufficient. Growth poor; hardy. Scarlet-red shaded vermilion, lighter edges.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	0	1	0	0	0	1
1919.....	OR	0	2	2	3	1	2	0	1	0	11
1920.....	OR	1	4	2	2	2	3	3	0	0	23
1921.....	OR	0	1	4	3	1	1	0	0	0	13

Discarded.

Constance, Per.** Stock, three-year-old, field-grown when planted. Large to extra large, fine form, double, slight scent, medium to long stem. Glossy foliage, sufficient. Growth poor; hardy. Deep yellow changing to buff-yellow.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	B	0	2	1	1	1	0	2	0	0	7
1919.....	B	0	2	1	0	1	1	0	1	0	7

Discarded.

Coquette des Alpes, HN.** Stock, two-year field-grown when planted. Medium size, full, fair form, fragrant, medium stem. Good foliage, sufficient. Growth tall; hardy. White.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	OR	0	4	18	16	9	8	5	0	0	68
1920.....	OR	0	8	35	25	19	14	10	0	0	121

Cornelia Cook, T.** Stock, two-year-old greenhouse-grown when planted. Medium size, full, fine form, delicate tea fragrance, medium to medium-long stems. Fine foliage, sufficient. Growth strong, medium height and bushy; hardy. Creamy white, in cool weather has greenish tinge in bud but opens creamy white.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1911.....	OR	0	0	4	5	4	4	2	0	0	19
1912.....	OR	0	1	6	10	7	9	3	2	0	38

Countess of Gosford, HT.*** Stock, two-year-old greenhouse-grown when planted. Large, double, fine form, fragrant, long stems. Fine foliage, sufficient. Growth vigorous; hardy. Salmon-pink suffused orange-yellow.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	OR	0	0	8	7	4	2	3	0	0	24
1920.....	OR	0	2	16	11	9	10	4	3	0	55

Crimson Champion, HT.** Stock, two-year field-grown when planted. Large, double, fine form, fragrant, medium stem. Fine foliage, sufficient. Growth good; hardy. Crimson-scarlet.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	B	0	0	0	1	1	3	1	1	1	8
1919.....	B	1	5	2	0	3	3	2	2	0	31
1920.....	B	0	1	2	5	5	5	5	2	1	34
1921.....	B	3	8	8	7	4	6	3	6	2	47

Crimson Queen, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Small to medium size, fair form, full, fragrant, short stem. Medium good foliage, sparse. Growth medium; medium hardy. Velvety crimson at its best.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	2	1	0	0	0	3
1919.....	OR	0	1	1	1	1	1	2	2	0	10
1920.....	OR	0	1	3	1	0	4	3	2	0	14

Discarded.

*Dinsmore, HP.** Stock, ten-year-old established plant when records were started. Full, poor form, buds ball badly in wet weather, small to medium-large, very fragrant, stems short to medium. Good foliage, slight mildew, plentiful. Growth vigorous, bushy; hardy. Dull crimson.

Year	Stock	Number of blooms per plant									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0 27	0	5	1	3	1	0	0	37	
1919.....	OR	0 45	13	12	1	0	0	0	0	61	

Of May crop, 15 failed to open fully.
Discarded.

Dorothy Page-Roberts, HT.* Stock two-year-old field-grown when planted. Fine form, short to medium stem, large, full, fragrant. Good foliage, sufficient. Growth strong; hardy. Coppery pink and apricot.

Year	Stock	Blooms per plant (1 plant)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	B	0	1	3	2	2	0	4	1	0	11
1919.....	B	1	3	6	4	0	5	4	1	2	23
1920.....	B	1	3	7	4	4	0	3	3	0	22
1921.....	B	0	0	5	4	1	0	4	3	1	17

Double White Killarney, HT.**
Stock, two-year-old field-grown when
planted. Large, fine form, double,
very fragrant, long stem, Fine foliage.

sufficient. Growth medium; hardy.
Pure white.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	4	5	1	4	2	0	0	1	12
1919.....	OR	0	3	8	12	1	6	5	1	0	35
1920.....	OR	1	3	8	12	0	9	4	1	1	35

Edith Part, HT.* Stock, 3-inch pot greenhouse-grown when planted out. Medium size, fine form, double, fragrant, stem short. Fine foliage, sufficient. Growth fair; hardy. Rich red suffused salmon and salmon-yellow.

Year	Stock	Av. blooms per plant (2 plants)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	OR	0	0	0	1	1	1	1	0	0	3
1919....	OR	0	0	0	1	3	2	2	1	0	7
1920....	OR	2	5	5	4	6	3	2	4	1	21
1921....	OR	2	2	6	8	6	3	2	4	2	34

Etoile de Mai, Poly.** Stock, one-year-old greenhouse-grown when planted. Small, singly and in small sprays, double, fine form, fragrant, medium stems. Good foliage, plentiful. Growth strong but dwarf, bushy; hardy. Light buff-yellow, opening creamy buff.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	OR	0	0	3	2	0	0	0	2	0	7
1920.....	OR	4	9	1	11	6	16	0	2	0	48
1921.....	OR	12	15	8	6	35	20	8	6	33	145

Eugene Marlitt, C.^{***} Stock, two-year-old field-grown when planted. Full, fair form, small to medium, very fragrant, long stems. Good foliage, sufficient. Growth robust; hardy. Light scarlet-red.

Year	Stock	Blooms per plant (1 plant)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	OR	0	8	5	0	2	2	0	0	0	15
1920.....	OR	0	27	4	1	2	1	0	0	0	34
1921.....	OR	0	40	15	7	3	10	1	4	3	82

Evelyn, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Almost full, large, fine form, quite fragrant, long stem. Fine foliage, plentiful. Growth medium, strong; hardy. Almost the duplicate of *Ophelia*, except in number of petals, being more double, and is not as good as the latter in blooming qualities.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	B	0	1	0	1	4	4	0	1	0	11
1919.....	B	0	0	2	3	2	4	1	1	0	13
1920.....	B	1	1	2	2	1	3	2	1	0	13
1921.....	B	0	0	2	4	2	4	2	2	0	16

Discarded.

Evergreen Gem, HW.** Stock, two-year-old field-grown when planted. In small clusters, medium size, full, very fragrant, good form, short to medium stem. Growth weak; hardy. Fine foliage but sparse. Buff-yellow fading to white.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918† ...	OR	May 19 to 29. Sparse bloom scattered over this period.									
1919.....	OR	May 28 to June 12. Sparse bloom scattered over this period.									
1920.....	OR	No bloom.									

Discarded.

†Second season after planting.

Frank W. Dunlop, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Full, fine form, large, fragrant, long stems. Fine foliage, sufficient. Growth tall, slender, vigorous, hardy. Deep carmine-rose, shaded even deeper.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1920.....	OR	0	0	1	0	1	1	0	0	0	4
1921.....	OR	0	4	9	3	1	4	3	2	0	26
1922.....	OR	2	7	6	6	4	6	2	1	1	35

Frau Bertha Kiese, HT.** Stock, three-year-old field-grown when planted. Fine form, semi-double, medium size, slight fragrance, medium stem. Foliage fine and leathery but sparse. Growth poor; hardy. Clear deep yellow, but fades quickly.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1920.....	B	0	4	0	0	0	0	0	0	0	4
1921.....	B	0	3	1	0	0	0	0	0	0	4
1922†.....	B	0	3	1	0	0	0	0	0	0	4

†No bloom. Discarded.

Frau Karl Druschki, HP.* Stock, two-year-old greenhouse-grown when planted. Large to extra large, double fine form, medium to long stem. Fine foliage, plentiful, slight mildew, slight spot. Growth very vigorous; very hardy. Purest white.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1917 ..	OR	0	0	0	0	0	0	3	1	0	4
1918 ..	OR	0	57	0	0	0	0	0	0	0	57
1919 ..	OR	0	122	7	0	0	12	3	0	0	144
1920 ..	OR	0	250	2	0	0	0	0	0	0	252
1921 ..	OR	3	96	10	0	0	3	14	4	3	133

Friedrichsruh, HT.** Stock, two-year-old greenhouse-grown when planted. Large, full, good form, very fragrant, medium-long stems. Foliage good, sufficient. Growth low, strong, bushy; hardy. Dark maroon-red with blackish purple shadings.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1915.....	OR	0	1	3	5	1	4	2	0	0	16
1916.....	OR	0	3	7	6	4	7	4	2	0	33

Gardenia, HW.** Stock, two-year-old field-grown when planted. Medium large, fine form, double, singly and in small sprays, very fragrant, medium to long stems. Fine glossy foliage, persistent, plentiful. Growth

very vigorous; hardy. Rich yellow in bud, opening to creamy white. Fine for banks, walls, etc.

Year	Blooming period per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1917.....	OR	No bloom.									
1918.....	OR	May 19 to June 3.									
1919.....	OR	Abundant bloom.									
1920.....	OR	May 19 to June 2.									
		Abundant bloom.									
		May 31 to June 10.									
		Fair amount of bloom; activities of plant apparently turned to making of new wood.									
1921.....	OR	May 15 to June 1.									
		Profuse bloom.									

General MacArthur, HT.*** Stock, two-year-old greenhouse-grown when planted out. Small, semi-double, good form, fragrant, medium stem. Foliage fair. Growth poor; not hardy. Nearly a bright crimson.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918†....	OR									
1919.....	OR	0	0	1	2	0	0	0	0	3
1920†....	OR									

†No bloom; winter-killed. ‡Spring-killed.

George Elger, Poly.* Stock, 4-inch pot, greenhouse-grown when planted. Singly and in small sprays, double, fine form, small, tea fragrance, short to medium stems. Fine foliage, plentiful. Growth dwarf, bushy; hardy. Fine for edging. Golden yellow opening to creamy yellow.

Year	Av. blooms per plant (3 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	7	16	17	4	9	1	11	166
1919.....	OR	0	8	18	6	6	7	2	0	47
1920.....	OR	0	9	3	16	12	12	9	8	372

Gorgeous, HT.** Stock, two-year-old field-grown when planted. Large,

fine form, double, fine fragrance, medium stem. Fine foliage, sufficient. Low weak growth; medium hardy. Deep orange-yellow blended copper.

Year	Av. blooms per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	2	2	1	1	0	2	1	0
1919.....	OR	Spring-killed.								

Gruss an Teplitz, HT.*** Stock, two-year-old field-grown when planted. Small to medium size, double, plant form, very fragrant, medium to long stems. Fine foliage, sufficient, slight spot. Bright crimson-scarlet.

Year	Av. blooms per plant (3 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918....	OR	0	5	12	23	11	9	3	0	2
	B†	0	0	2	0	0	1	0	2	0
1919....	OR	0	3	15	38	22	14	10	5	0
	B†									
1920....	OR	0	4	34	21	19	15	26	11	5
1921....	OR	0	0	25	40	25	23	14	17	7

†Only one plant. ‡Spring-killed.

Henry M. Stanley, T.* Stock, fifteen-year-old established plant when records were started. Good form, medium to large, double, quite fragrant, short to long stems, Fine foliage, plentiful. Growth robust, bushy; hardy. Salmony rose-pink.

Year	Number of blooms per plant									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	3	7	10	8	1	3	0	0
1919.....	OR	0	0	6	9	6	4	2	2	1
1920.....	OR	0	1	9	12	5	9	5	2	3

Herzog Friedrich II von Anhalt, HT.** Stock, two-year-old field-grown when planted. Small to medium size, full, good to fine form, very fragrant, long stems. Fine foliage, sufficient. Growth strong, medium height, spreading; hardy. Soft pink and white

blended, with dainty rosy pink tinted centers.

Year	Av. blooms per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918.....	B	0	1	2	2	1	3	0	4	0 13
1919.....	B	0	2	9	4	4	2	2	3	0 25
1920.....	B	0	7	4	4	3	8	2	0	0 26
1921.....	B	0	6	9	3	7	4	2	0	0 39
1922.....	B	6	2	3	9	8	9	5	2	46

Hiawatha, HW.** Stock, three-year field-grown when planted. Large, single, in medium-sized clusters, good form, long stems. Fine foliage, plentiful. Very vigorous growth; hardy. Deep crimson shading to pure white bases. Fine for covering trellises, arbors, and banks.

Year	Blooming period per plant									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1919.....	OR	No bloom.								
1920.....	OR	June 1 to 24. Profuse bloom.								
1921.....	OR	June 7 to 25. Profuse bloom.								
1922.....	OR	June 5 to 25. Profuse bloom.								

Hugonis, Species.* Stock, two-year-old field-grown when planted. Medium sized to medium-small, single, good form, no stem, blooms appearing singly all around branches somewhat on order of hollyhocks. Fine distinctive foliage, plentiful. Growth exceedingly vigorous; hardy. Color variable, different seasons and sometimes same season, from pale creamy yellow in some flowers to rich canary-yellow in others. Fine as single specimens in large landscape plantings.

Year	Blooming period, one plant									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918.....	OR	No bloom.								
1919.....	OR	May 1 to 10. Fair amount of bloom.								
1920.....	OR	May 1 to 21. Bloom very profuse.								
1921.....	OR	April 6 to 10; May 9 to 12. Early, profuse bloom, killed by late heavy frost; second, very small crop in May.								
1922.....	OR	May 3 to 25. Bloom was at its best this season.								

Indiana, HT.* Stock, two-year-old field-grown when planted. Medium to large size, double, good to fine form, quite fragrant, medium to long stems. Good foliage, sufficient, very slight mildew. Growth strong, tall; hardy. Deep orange-pink.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918.....	B	0	0	3	1	1	1	3	0	0 9
1919.....	B	0	3	3	3	3	7	2	1	0 22
1920.....	B	0	0	3	4	4	2	4	3	0 20
1921.....	B	4	7	12	4	1	8	4	3	1 44
1922.....	B	8	1	8	7	3	9	2	0	2 40

Irish Fireflame, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Medium to large size, single, finely formed buds, very fragrant, long stems. Fine leathery foliage, sufficient. Growth strong, slender, bushy; hardy. Deep orange, flushed scarlet, opening to pale old-gold.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918.....	OR	0	0	0	1	0	0	3	0	4
1919.....	OR	0	2	4	1	2	2	2	1	14
1920.....	OR	0	0	5	13	8	5	4	2	35
1921.....	OR	5	10	11	10	5	5	3	2	52
1922.....	OR	7	7	23	12	15	25	8	3	102

J. B. Clark, HP.*** Stock, two-year-old field-grown when planted. Extra large, good to fine form, double, very fragrant, medium to medium-long stems. Fine foliage, slight mildew, sufficient. Growth very vigorous, tall, bushy; hardy. Best in a light shade. Deep scarlet-crimson.

Year	Av. blooms per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. Total
1918.....	OR	0	0	0	3	0	0	5	3	0 11
1919.....	OR	0	12	24	0	0	0	0	6	0 42
1920.....	OR	0	0	38	3	0	3	0	4	0 48
1921.....	OR	0	23	28	0	0	0	2	0	2 61
1922.....	OR	0	35	22	0	0	0	0	7	4 68

*Killarney, HT.**** Stock, two-year-old field-grown when planted. Large good to fine form, semi-double, quite fragrant, medium to long stem. Sufficient foliage, slight spot and mildew. Growth poor; hardy. Clear bright pink, lighter than Killarney Queen.

Year	Stock	Av. blooms per plant (3 plants)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	OR	0	0	4	1	1	0	3	0	0	10
1919....	OR	0	0	3	4	1	1	0	0	0	6
1920....	OR	0	0	4	3	3	0	1	1	1	11
1921....	OR	0	0	4	3	6	3	0	2	4	18

Killarney Brilliant, HT.** Stock, two-year-old field-grown when planted. Large to very large, double, good to fine form, very fragrant, medium to long stem. Fine foliage, sufficient. Growth strong; hardy. Clear rosy crimson.

Year	Stock	Av. blooms per plant (3 plants)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	6	6	6	4	5	1	3	0	33
1919.....	OR	1	11	6	2	4	4	4	2	0	32
1920.....	OR	0	3	10	2	3	2	2	1	1	23
1921.....	OR	1	4	10	7	3	2	8	3	0	43

Kaiserin Auguste Victoria, HT.** Stock, two-year-old greenhouse-grown when planted. Medium size, good to fine form, full,^ddouble, fragrant, long to medium-long stem. Fine foliage, sufficient. Growth medium; hardy. Creamy white.

Killarney Queen, HT.* Stock, two-year-old field-grown when planted. Extra large, fine form, semi-double, quite fragrant, medium to long stem. Sufficient foliage, slight mildew. Growth strong; hardy. Deep brilliant pink.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	B	0	7	2	1	1	0	1	5	0	18
1919....	B	0	4	3	6	4	0	1	3	1	17
1920....	B	1	13	3	3	7	1	2	2	0	29
1921....	B	0	4	4	1	1	2	2	3	0	26

Lady Alice Stanley, HT.** Stock, two-year-old field-grown when planted. Large, fine form, full, quite fragrant, medium to long stems. Fine foliage,

sufficient. Growth strong; hardy. Coral-rose shaded flesh-pink.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	4	3	0	3	3	3	1	0	17
1919.....	OR	0	1	2	3	1	6	5	2	0	20
1920.....	OR	1	1	5	3	3	8	1	1	1	24
1921.....	OR	Spring killed.									

Lady Ashtown, HT.*** Stock, 4-inch pot, greenhouse-grown when planted. Medium large, fine form, double, faint fragrance, medium stem. Fine foliage, sufficient. Growth medium strong; hardy. Light rose with silvery reflex, bases light yellow.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	1	1	0	1	0	3
1919.....	OR	0	0	1	1	2	2	1	1	0	8
1920.....	OR	0	12	4	1	1	4	1	2	0	25
1921.....	OR	0	16	0	3	0	5	3	5	0	32
1922.....	OR	8	3	7	2	2	3	2	7	1	35

Lady Downe, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Medium size, double, fine form, fragrant, long stem. Fine foliage but sparse. Growth fair; medium hardy. Light yellow.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	0	1	0	1	0	2
1919.....	OR	0	0	0	2	0	1	0	0	0	3
1920.....	OR	0	0	3	0	0	2	0	0	0	5

Discarded.

Lady Hillingdon, T.** Stock, two-year-old greenhouse-grown when planted. Medium to large, semi-double, fine form, tea fragrance, medium to long stems. Fine foliage, plentiful. Growth strong, slender, spreading; hardy. Color variable, darker in cool weather—deep apricot-yellow, shaded orange, sometimes

only creamy yellow, particularly in hot or cloudy weather.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	7	5	5	3	4	3	2	0	29
	B	0	0	0	4	1	2	4	0	0	11
1919.....	OR	0	4	6	3	4	12	4	5	0	38
	B	0	1	5	3	5	6	2	2	1	25
1920.....	OR	0	3	3	1	8	3	6	1	0	25
	B	0	0	0	3	1	2	3	0	0	9
1921.....	OR	1	7	5	12	9	2	7	5	3	57
	B	1	2	4	3	10	4	5	5	0	34

Lady Ursula, HT.* Stock, 3-inch pot, greenhouse-grown when planted. Fine form, full, large, fragrant, long stems. Fine foliage, sufficient. Vigorous upright growth; hardy. Flesh-pink.

Year	Number of blooms per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	0	0	1	0	0	1
1919.....	OR	1	0	4	3	1	4	9	0	0	22
1920.....	OR	0	2	6	4	2	9	3	1	1	28
1921.....	OR	0	6	12	3	1	2	3	3	1	34
1922.....	OR	0	4	15	9	3	10	6	1	3	51

La Tosca, HT.*** Stock, 4-inch pot, greenhouse-grown when planted. Medium to medium-large, double, good to fine form, very fragrant, medium to long stems. Fine foliage, sufficient, slight spot. Growth very vigorous, tall, bushy; hardy. Silvery pink with deeper center.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	0	1	2	0	0	3
1919.....	OR	0	0	5	10	11	12	9	1	0	48
1920.....	OR	0	1	20	33	38	20	5	2	0	118
1921.....	OR	0	15	60	72	38	13	18	6	0	222
1922.....	OR	9	2	39	56	28	19	3	11	6	173

Louise Walter, Poly.* Stock, two-year-old greenhouse-grown when planted. Medium size, in clusters, double, fair form, delicate fragrance, medium stems. Good foliage, suffi-

cient. Medium dwarf growth; hardy. Blush pink to white.

Year	Av. clusters per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	4	3	3	1	1	2	2	0
1919.....	OR	0	5	3	3	4	3	3	1	0
1920.....	OR	0	2	10	4	4	2	2	1	0
										25

Average five blooms per cluster.

*Mary, Countess of Ilchester, HT.*** Stock, 3-inch pot, greenhouse-grown when planted. Large, variable form, very double, fragrant long stem. Foliage sufficient, subject to rust. Fair growth; hardy. Crimson-carmine.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918†....	OR	0	0	0	0	0	1	0	1	3
1919.....	OR	0	0	0	0	0	1	0	1	0
1920.....	OR	0	0	1	0	0	1	1	0	0
1921.....	OR	0	1	2	1	0	1	1	0	1
										7

†No bloom. Discarded.

*May Miller, HT.** Stock, two-year-old field-grown when planted. Fine form, large, double, long stem. Good foliage, sufficient. Growth strong; hardy. Coppery rose, blended peach-pink and apricot.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1919.....	B	0	2	5	5	3	6	2	1	0
1920.....	B	0	3	9	7	6	3	6	2	0
										24
										137

*Mignonnette, Poly.** Stock, fifteen-year-old established plant when records were started. Singly and in small sprays, small, full, fine form, delicate fragrance, medium to long stems. Fine foliage, plentiful. Growth robust, medium dwarf, bushy; hardy. Delicate pink.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918....	OR	0	86	12	13	1	8	8	1	0
1919....	OR	0	9	47	0	0	14	3	2	0
1920....	OR	0	76	16	10	0	9	2	0	5
										118

*Milady, HT.*** Stock, 3-inch pot, greenhouse-grown when planted out. Large, full, fine form, slight fragrance, short stem. Fine foliage and plentiful. Poor growth; not hardy. Clear rosy red.

Year	Av. blooms per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1917†....	OR	0	1	1	1	0	0	0	1	0
1918†....	OR	1	1	1	0	0	2	1	0	0
										4

†One plant died during winter of 1917-18.

†This plant died during winter of 1918-19.

*Miss Kate Moulton, HT.**** Stock, two-year-old field-grown when planted. Fine form, semi-double, medium size, fragrant, medium stem. Good foliage, plentiful. Strong growth; hardy. Soft shell-pink, reverse darker.

Year	Blooms per plant (1 plant each)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	1	4	4	1	6	5	2	0
	B	0	0	1	1	2	1	0	1	0
1919†....	OR	1	5	9	4	3	8	4	3	1
	B	0	2	6	1	0	7	1	1	0
1920.....	OR	2	3	11	6	2	10	5	1	1
	B	1	3	6	3	3	7	2	0	0
										25

†Growth of budded plant was poor.

*Mlle. Franziska Krüger, T.** Stock, ten-year-old plant established when records were started. Medium size, full, good to fine form, tea fragrance, medium to long stem. Fine foliage, sufficient. Growth dwarf, vigorous, bushy; hardy. Coppery yellow shaded rose.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	5	6	13	6	11	1	1	0
1919.....	OR	0	1	3	8	1	8	3	3	0
1920.....	OR	1	5	1	10	5	6	4	2	0
1921.....	OR	0	5	8	13	3	3	1	5	1
										39

*Mme. Butterfly, HT.*** Stock, 4-inch pot, greenhouse-grown when planted. Fine form, full, large, fragrant, medium to long stems. Foliage

fine, sufficient. Growth medium strong; hardy. Apricot-pink and golden yellow blended.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1920.....	B	0	0	3	0	1	3	2	0	0	9
	OR	0	0	2	0	1	2	1	1	0	6
1921.....	B	0	1	3	1	3	1	1	0	0	12
	OR	0	2	5	3	5	4	3	1	0	27
1922.....	B	0	0	2	4	4	4	3	2	1	24
	OR	4	1	2	2	3	2	1	2	2	31

Mme. Colette Martinet, HT.** Stock, two-year-old field-grown when planted. Medium to large, double, fine form, tea fragrance, short to medium stem. Fine leathery foliage, sufficient. Growth low, bushy; fairly hardy. Deep yellow, shaded orange-yellow.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	B	0	2	2	1	2	4	0	0	0	11
1919.....	B	Spring-killed.									

Mme. Edmée Metz, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Good to fine form, large, full, fragrant, long stem. Dark leathery foliage, sufficient. Growth medium; hardy. Rosy carmine, shaded salmon.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	1	2	4	4	2	0	0	13
1919.....	OR	1	2	4	3	3	6	3	2	1	25
1920.....	OR	0	1	9	5	2	10	4	1	2	34
1921.....	OR	2	4	2	4	2	9	3	5	1	33

Mme. Jules Grolez, HT.* Stock, two-year-old field-grown when planted. Fine form, medium-large, full, fragrant, medium-long stem. Foliage good, sufficient. Growth strong; hardy. Bright, clear rose.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	B	1	2	5	4	4	3	1	1	0	21
1920.....	B	0	4	8	7	4	6	3	1	1	34
1921.....	B	2	3	6	9	5	7	4	2	0	38

Mme. Segond Weber, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Fine form, double, very large, fragrant, long stem. Fine foliage, sufficient. Growth poor; fairly hardy. Bright salmon-pink.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	1	1	0	0	2	1	1	0	6
1919.....	OR	1	2	1	1	0	3	2	1	1	12
1920.....	OR	Spring-killed.									

Mosella, Poly.** Stock, two-year-old greenhouse-grown when planted. Large for the type, full, fine form, delicate fragrance, short to medium stems. Fine foliage, sufficient. Growth medium dwarf, bushy; hardy. Buff and apricot-yellow.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	3	10	6	7	5	4	1	0	36
1919.....	OR	0	2	12	10	2	9	3	2	0	46

Mrs. Aaron Ward, HT.** Stock, two-year-old greenhouse-grown when planted. Fine form, large, double, quite fragrant, medium to medium-long stem. Fine foliage, sufficient. Growth poor; hardy. Nankeen-yellow and orange, changing when open to salmon-pink.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	2	5	3	3	3	0	2	1	19
1919.....	OR	0	3	1	0	0	1	5	1	0	11
1920.....	OR	0	0	2	0	1	1	2	3	0	9
1921.....	OR	0	5	1	0	0	3	2	0	0	11

Discarded.

Mrs. Belmont Tiffany, HT.** Stock 4-inch pot, greenhouse-grown when planted. Medium size, fine form, double, fragrant, long stem. Foliage sparse to sufficient, slightly subject

to rust and spot. Growth poor; not hardy. Deep yellow.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	1	0	1	0	0	1	3
1919.....	OR	Winter-killed.									

Mrs. B. R. Cant, T.** Stock, 3-inch pot, greenhouse-grown when planted. Small, full, fine form, tea fragrance, medium stems. Fine foliage, plentiful. Growth vigorous, bushy; hardy. Bright rose, shaded deeper.

Year	Number of blooms per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	1	4	7	0	3	0	15
1919.....	OR	0	0	2	5	2	3	2	4	0	18
1920.....	OR	0	0	5	5	5	5	6	1	0	27
1921.....	OR	0	3	3	15	2	4	4	1	0	43

Mrs. Charles Bell, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Fine form, large, double, fragrant, long stem. Foliage sufficient, slight spot. Growth strong; hardy. Soft shell-pink with salmon tints.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	1	1	0	1	0	1	0	4
1919.....	OR	1	1	3	1	1	2	1	0	0	10
1920.....	OR	0	4	5	3	0	3	1	2	1	19
1921.....	OR	1	8	10	3	2	4	5	8	1	42

†The plants were moved in the early spring to a more favorable location but in the same type of soil.

Mrs. Chas. Gersdorff, Cl.HT.** Stock, one-year-old field-grown when records were started. Very large, good form, double, strong fragrance, stems medium to long. Foliage plentiful, slight spot and mildew in unfavorable weather. Vigorous climber, but not over 15 feet. Clear shell-pink,

toned lighter, deeper center, inside of petals silvery blush-white.

Year	Av. blooms per plant (6 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918†..	OR										
1919†..	OR										
1920..	OR	1	60	0	0	0	1	9	1	0	72
1921..	OR	5	300	26	3	0	2	33	3	1	373
1922..	OR	0	283	16	1	1	4	23	7	2	337
1916†..	OR	9	251	11	2	1	5	63	3	0	345

†No bloom.

†This was the original plant, growing in a heavy clay soil, and five years old.

Mrs. George Shawyer, HT.** Stock, two-year-old field-grown when planted. Good to fine form, medium to large size, double, tea fragrance, medium to long stem. Foliage good, sufficient on own root and sparse on budded. Growth strong; medium hardy. Clear brilliant rose.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	2	2	1	2	2	1	2	0	12
1919.....	B	0	0	2	1	1	0	1	0	0	5
	B	Winter-killed.									
	B	Winter-killed.									

Mrs. John Cook, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Large to extra large, fine form, double, fragrant, stems medium to long. Foliage fine and sufficient. Growth strong; hardy. Generally white with a slight flush in bud, opening pure white, the flush being deeper in cool weather.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1920.....	B	0	1	3	1	0	4	1	0	0	10
1921.....	B	0	4	6	3	1	5	2	0	0	21
1922.....	B	5	3	12	5	3	6	2	6	1	43

Mme. Jules Gouchault, Poly.** Stock, two-year-old field-grown when planted. In large and in small sprays, double, good form, medium size,



PLATE XVIII. An unnamed Van Fleet hybrid between *Rosa Hugonis* and the Hybrid Tea, *Radiance*. (See page 189.)

medium stems. Good foliage, sufficient. Growth strong; hardy. Vermilion-pink shaded orange, passing to brilliant pink.

Year	Number of blooms per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1920....	OR	0	0	9	18	9	20	8	3	0	57
1921....	OR	0	21	36	38	23	34	11	6	0	169

Mme. Paul Euler, HT.** Stock, two-year-old field-grown when planted. Fine form, double, large, quite fragrant, medium to long stem. Fine foliage, sufficient. Growth vigorous; hardy. Clear deep vermilion-pink.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	OR	0	2	9	5	3	4	3	0	0	26
1919....	OR	0	0	9	3	6	7	4	2	0	31
1920....	OR	1	1	4	6	5	6	5	3	1	32
1921....	OR	3	9	3	14	1	5	3	1	0	39

Mrs. Robert Garrett, HT.** Stock, three-year-old field-grown when planted. Fine form, medium size, full, tea fragrance, medium stem. Good foliage, sufficient. Growth medium; medium hardy. Deep shell-pink.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919....	OR	0	1	1	1	3	4	3	1	0	14
1920....	OR	1	3	7	8	4	7	5	2	0	37
1921....	OR										

Nita Weldon, T.*** Stock, 3-inch pot, greenhouse-grown when planted. Medium size, full, good form, tea fragrance, short stem. Sufficient foliage, slight mildew. Growth moderate; medium hardy. Creamy white with golden heart.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1917....	OR	0	0	0	1	1	1	0	0	0	3
1918....	OR	0	1	3	5	8	3	1	0	0	21
1919....	OR	0	3	5	5	6	2	1	1	0	23

Destroyed by fire, winter 1919.

Norma, HT.* Stock, fifteen-year-old established plant when records were started. Extra large, double, good form, with fragile petals easily injured by rain, buds also balling badly, quite fragrant, medium to very long stems. Fine foliage, plentiful. Growth very vigorous, tall, bushy; hardy. Clear bright rosy pink.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	OR	0	13	0	0	0	0	6	0	0	19
1919....	OR	0	0	17	3	0	0	7	0	0	27
1920....	OR	0	5	42	0	0	0	2	4	0	53
1921....	OR	0	10	22	1	0	0	0	0	0	33

Discarded.

Old-Gold, HT.* Stock, two-year-old field-grown when planted. Medium to large, fine form, single, slightly fragrant, long stems. Fine foliage, sufficient. Growth strong, bushy, slender; hardy. Reddish orange shaded copper and apricot opening pale gold.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	OR	0	2	2	3	3	3	1	1	0	15
1919....	OR	0	0	5	4	3	8	1	0	0	21
1920....	OR	0	1	6	3	3	5	1	9	4	130
1921....	OR	3	5	11	3	0	3	3	1	0	231

Ophelia, HT.** Stock, two-year-old greenhouse-grown when planted. Medium to large size, double, fine form, delicate fragrance, medium to long stems. Fine foliage, sufficient. Growth vigorous, bushy; hardy. Light salmon-flesh, blending to yellow at base.

Year	Av. blooms per plant (4 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918....	OR	0	5	6	4	4	1	3	1	0	24
1919....	OR	0	3	5	7	9	2	2	1	0	29
1920....	OR	1	4	3	3	4	5	2	2	1	25
1921....	OR	4	8	10	3	4	5	0	3	1	138

Panama, HT.*** Stock, 4-inch pot, greenhouse-grown when planted. Medium large, fine form, double, fragrant, medium stems. Good foliage, sufficient. Growth medium strong; hardy. Pale blush-pink.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	0	2	1	2	0	0	5
1919.....	OR	0	0	1	2	2	2	2	1	1	11
1920.....	OR	0	0	1	3	2	4	3	2	1	016
1921.....	OR	0	0	0	9	14	6	3	3	2	037
1922.....	OR	0	1	6	16	8	5	1	2	1	40

Perle d'Or, Poly.** Stock, two-year-old greenhouse-grown when planted. No bloom first year and winter-killed during following winter. Growth was poor.

Pharisaer, HT.** Stock, two-year-old field-grown when planted. Large full, fine form, fragrant, medium-long stems. Good foliage, sufficient. Growth strong; hardy. Rosy white shaded silvery salmon in center.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1916.....	B	0	1	9	11	6	9	3	1	0	40
1917.....	B	0	3	8	8	7	8	2	3	0	39

Pink Roamer, HSB.** Stock, two-year-old field-grown when planted. Single, in small clusters, small to medium size, good form, cinnamon-scent, short to medium stem. Poor foliage, with faint scent, plentiful early in season, very sparse to none by end of June, subject to rust and red spider. Growth very vigorous; hardy. Deep rose-pink.

Year	Blooming period per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1917.....	OR	No bloom.									
1918.....	OR	May 19 to 29. Very profuse; old flowers shed petals.									
1919.....	OR	May 22 to June 5. Abundant bloom.									
1920.....	OR	May 29 to June 13. Plant hidden in bloom.									

Pink Soupert, T.-Poly.* Stock, eight-year-old established plant when records were started. Good form, full, medium size, very fragrant, short to long stem. Singly, sometimes in clusters. Foliage plentiful, slightly susceptible to spot. Growth very vigorous, bushy; hardy. Clear rosy pink.

Year	Stock	Blooms per plant (1 plant)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918 ..	OR	0	24	33	20	51	33	12	1	8	182
1919 ..	OR	0	107	30	55	22	50	6	5	0	275
1920 ..	OR	0	69	8	26	22	8	2	0	0	135
1921 ..	OR	3	76	45	60	18	43	10	5	1	261

Premier, HT.* Stock, 4-inch-pot, greenhouse-grown when planted. Large, fine form, double, fine fragrance medium to medium-long stem. Foliage good, sufficient. Growth medium strong; hardy. Deep rose-pink.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1920.....	B	0	1	0	0	1	0	0	0	0	2
1921.....	B	0	2	2	1	0	4	2	1	0	13
1922.....	B	1	3	9	7	8	6	2	5	1	42

Primerose, HT.** Stock, two-year-old field-grown when planted. Fine form, double, medium to large, faint fragrance, short to medium stem. Fine foliage, sufficient. Growth dwarf, weak; medium hardy. Deep yellow shaded apricot.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	2	1	0	1	1	0	0	0	5
1919.....	OR	Spring-killed.									

Prince Camille de Rohan, HP.*** Stock, ten-year-old established plant when records were started. Medium to large, full, good form, quite fragrant, weak neck, short to medium stem. Good foliage, slight mildew,

plentiful. Growth robust, bushy; hardy. Deep crimson with blackish shadings.

Year	Number of blooms per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	30	0	0	0	0	0	0	0	30
1919.....	OR	0	53	3	0	0	0	0	0	0	56
1920.....	OR	0	16	17	0	0	0	0	0	0	33
1921.....	OR	0	60	12	0	0	0	0	0	0	72

Prince de Bulgarie, HT.** Stock, two-year-old field-grown when planted. Large, full, fine form, fragrant, long stems. Foliage good, some spot and mildew. Growth strong; hardy. Silvery flesh shaded deeper with some yellow—variable.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1915.....	B	0	2	10	8	2	4	2	2	0	30
1916.....	B	0	0	14	10	1	11	3	0	1	40

Prof. C. S. Sargent, HW.** Stock, two-year-old field-grown when planted. Singly and in small clusters, good form, medium size, double, quite fragrant, short to medium stem. Fine foliage, sufficient. Growth strong; hardy. Fine for banks. Buff-yellow to golden center, but fading to a creamy buff when fully open.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	OR	No bloom.									
1920.....	OR	May 25 to June 4. Generous bloom.									
1921.....	OR	May 14 to June 1. Generous bloom.									

Radiance, HT.** Stock, three-year-old field-grown when planted. Large to extra large, double, good to fine form, fragrant, slightly weak neck, medium to long stems. Fine foliage, sufficient. Very vigorous, bushy;

hardy. Rosy carmine, blended with salmon, with coppery yellow showing on bases of petals.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1919.....	OR	0	0	6	8	5	7	4	3	0	33
1920.....	OR	0	5	10	6	4	6	9	2	0	42
1921.....	OR	1	16	20	8	4	8	10	7	0	74
1922.....	OR	9	4	14	7	7	7	2	10	4	64

Red Admiral, HT.* Stock, 3-inch pot, greenhouse-grown when planted. Medium size, semi-double, good form, slight fragrance, medium stem. Foliage sufficient, slight spot. Growth very low, bushy; hardy. Bright cerise-red.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	1	1	1	4	4	3	0	0	14
1919.....	OR	1	5	2	0	2	3	1	2	0	16
1920.....	OR	0	3	4	3	5	1	0	3	1	20

Discarded.

Red-Letter Day, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Semi-double, fine form, medium to large size, slightly fragrant, medium to medium-long stems. Fine foliage, sufficient. Growth strong; hardy. Brilliant scarlet with slight crimson tone.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	3	3	1	1	0	0	8
1919.....	OR	1	1	9	9	7	1	0	3	0	31
1920.....	OR	0	1	11	1	5	4	0	1	2	25
1921.....	OR	3	8	15	4	2	9	3	3	0	47

Red Radiance, HT. (Gude.)*** Stock, 4-inch pot, greenhouse-grown when planted out. Large to very large, fragrant, double, of fine cupped form, medium to long stems. Fine

foliage, sufficient. Growth very strong hardy. Clear dark cerise-red.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	1	1	0	0	0	0	0	0	2
1919.....	OR	0	0	3	2	1	0	1	1	0	8
1920.....	OR	1	3	4	4	2	4	1	1	1	121
1921.....	OR	0	5	10	14	5	20	7	6	2	69
1922.....	OR	2	4	8	9	4	14	8	5	3	57

Red Radiance, HT. (Pierson).*** Stock, two year-old field-grown when planted out. Differs from above only in color, a lighter shade of cerise-red.

Year	Av. blooms per plant (4 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	3	3	5	6	3	4	3	4	0 23
1919.....	OR	0	3	9	3	7	2	3	5	2	0 31
1920.....	OR	1	9	13	12	3	3	1	3	0	3 35
1921.....	OR	2	12	18	3	4	15	8	5	1	6 8
1922.....	OR	4	15	16	5	1	12	4	4	3	6 4

Rena Robbins, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Fine form, double, medium large, fragrant, medium to medium-long stem. Sufficient foliage, slightly subject to spot. Growth strong; hardy. Light yellow blending to orange-yellow center.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	1	3	1	1	5	4	0	0	15
1919.....	OR	0	5	5	1	0	2	4	1	0	24
1920.....	OR	1	3	10	3	1	12	3	0	2	35

Richmond, HT.*** Stock, two-year-old greenhouse-grown when planted. Medium size, semi-double, good to fair form, faintly fragrant, medium stem. Good foliage, sufficient. Growth poor, hardy. Crimson-scarlet.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	4	3	0	3	2	1	0	0	13
1919.....	OR	0	1	3	0	1	5	0	1	0	11
1920.....	OR	0	2	3	0	0	3	4	0	0	12

Discarded.

Robin Hood, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Fine form, medium to large size, full, intensely fragrant, long stem. Fine foliage, sufficient. Growth strong, bushy, hardy. Rosy scarlet, variable in shade.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	0	1	3	2	1	0	0	7
1919.....	OR	1	4	6	2	2	5	3	0	0	35
1920.....	OR	3	5	11	10	7	8	4	2	1	51

Rosa Wichuraiana, Species.** Stock, 4-inch pot, greenhouse-grown when planted. In small clusters, single, small to medium size, good form, quite fragrant, long stems. Plentiful fine glossy foliage. Growth robust, compact, prostrate; hardy. Fine for banks. Pure white.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1917.....	OR	No bloom.									
1918.....	OR	June 8 to 20. Profuse bloom.									
1919.....	OR	June 14 to 26. Profuse bloom.									
1920.....	OR	June 19 to July 5. Quite profuse in bloom.									
1921.....	OR	June 20 to July 4. Quite profuse in bloom.									

Rose-Pink Ophelia, HT.* Stock, 4-inch pot, greenhouse-grown, when planted. Fine form, medium large, double, fragrant, long stem. Fine plentiful foliage. Growth poor; not hardy. A clear rosy pink.

Year	Av. blooms per plant (2 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	B	0	0	0	0	1	0	2	0	0	3
1919.....	B	0	0	1	4	0	1	3	0	0	8
1920.....	B	0	1	2	3	0	1	0	3	0	10
1921.....	B	Spring-killed.									

September Morn, HT.*** Stock, 3-inch pot, greenhouse-grown when planted. Good form, full, medium size, tea fragrance, medium stem.

Sufficient foliage, slight mildew.
Growth strong; hardy. Pale pink.

Year	Blooms per plant (1 plant)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918†	OR										
1919	OR	0	0	0	1	0	1	0	0	0	2
1920	OR	0	0	0	1	1	0	0	0	0	3
1921	OR	0	0	3	0	1	2	0	0	0	6

†No bloom. Discarded.

Souv. de la Malmaison, Br.* Stock, seventeen-year-old established plant when records were started. Large to extra large, full, fine form, tea fragrance, long stems. Fine foliage, sufficient. Growth vigorous, spreading; hardy. White and blush-pink blended.

Year	Number of blooms per plant										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	12	2	5	1	6	1	0	0	27
1919.....	OR	0	6	4	3	0	5	0	0	0	18
1920.....	OR	0	1	11	5	2	4	2	0	0	25
1921.....	OR	4	10	6	4	1	6	0	0	0	31

*Souv. de Pierre Notting, T.*** Stock, three-year-old field-grown when planted. Medium-large to large, good to fine form, full, quite fragrant, medium to medium-long stems. Foliage fine, plentiful. Growth vigorous, spreading, bushy; hardy. Golden yellow tinted buff and often coppery yellow and pink.

Year	Stock	Av. blooms per plant (3 plants)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	4	10	9	3	10	4	10	2	52
1919.....	OR	0	0	3	11	10	7	3	0	0	36
1920.....	OR	0	0	3	16	16	16	7	0	0	63
1921.....	OR	0	5	15	22	5	11	6	3	1	65
1922.....	OR	8	1	3	26	10	8	8	10	4	75

Sunburst, HT.* Stock, two-year-old field-grown when planted. Medium large, fine form, double, tea fragrance, long stem. Foliage fine,

sufficient. Growth strong; hardy.
Deep yellow to orange-yellow.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR B	0 0	2 1	1 0	1 1	1 0	2 0	1 2	0 0	0 0	8 6
1919.....	OR B	1 0	2 0	2 1	1 2	1 0	0 0	2 1	2 1	0 0	11 6

Discarded.

Sylvia, HT.** Stock, 3-inch pot, greenhouse-grown when planted. Growth poor; medium hardy. Silvery pink.

Year	Av. blooms per plant (3 plants)										
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	No bloom; foliage rusted.									
1919.....	OR	No bloom; foliage slight spot.									

Discarded.

Tip-Top, Poly.** Stock, 3-inch pot, greenhouse-grown, when planted. Perfectly formed, double, small, fragrant, singly and in small clusters, short stems. Foliage healthy. Very dwarf in growth, of value for edging. Nankeen-yellow, edges flushed with rose. Hardy.

Year	Stock	Av. blooms per plant (3 plants)									Total
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1918....	OR B	0	0	0	4	3	1	9	0	0	17
1919....	OR B	0	7	5	0	6	1	7	5	0	31
1920....	OR B	0	6	2	2	1	0	0	0	0	11
1920....	OR B	0	10	5	7	3	2	0	2	0	29
1921....	OR B	5	6	3	4	2	4	2	1	0	27
1921....	OR B	2	10	10	11	6	4	2	2	0	53
1921....	OR B	4	4	8	4	2	3	1	2	1	29
	B	6	14	9	2	6	3	3	15	0	61

Titania, CT.* Stock, 4-inch pot, greenhouse-grown when planted. Good form, large, double, tea fragrance, long stems. Fine foliage. Medium growth; medium hardy. Coppery with golden shadings.

Year	Stock	Blooms per plant (1 plant)									
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1918.....	OR	0	0	3	6	7	8	3			
1919.....	OR	Winter-killed.									

Wellesley, HT.* Stock, ten-year-old established plant when records were started. Medium to large size, double, good to fine form, very fragrant, medium to long stems. Fine foliage, sufficient. Growth vigorous, bushy; hardy. Rosy pink on the outside of the petals with silvery pink on the inside. Resembles *La France* very much and is much longer lived than that old favorite.

Year	Number of blooms per plant									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918†....	OR	0	2	2	1	1	3	2	1	1
1919.....	OR	0	0	1	1	2	7	5	2	0
1920.....	OR	1	5	6	2	3	5	3	2	1
1921.....	OR	0	6	5	4	1	7	5	6	1
1922.....	OR	1	4	7	3	2	9	3	6	3

†This plant had been growing all this time up against a hot brick wall. It was carefully moved early the following spring to a more favorable location where it has done very well.

White Killarney, HT.** Stock, 4-inch pot, greenhouse-grown when planted. Large, good to fine form, semi-double, quite fragrant, short to long stem. I prefer this to the double form, being freer in bloom. Fine foliage, sufficient. Growth medium strong; hardy. Pure white.

Year	Av. blooms per plant (3 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	2	1	0	1	3	0	1	0
1919.....	OR	0	0	5	3	3	1	1	3	0
1920.....	OR	0	2	2	3	4	5	2	1	1
1921.....	OR	0	2	9	3	6	3	5	2	0
1922.....	OR	2	6	12	6	2	8	4	8	3

White Maman Cochet, T.* Stock ten-and seventeen-year old established plants when records were started. Extra-large and large, fine form, but liable to ball in rainy weather, full, quite fragrant, medium to long stems. Fine foliage, plentiful. Growth vigorous, spreading; hardy. Ivory-white,

in cool weather slightly tinted with pale pink.

Year	Av. blooms per plant (2 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	11	4	5	4	2	1	4	1
1919.....	OR	2	1	6	8	5	4	7	2	1
1920.....	OR	0	5	11	4	2	7	5	1	0
1921.....	OR	1	8	6	6	4	10	3	5	2

Wichuraiana variegata, W.** Stock, 4-inch own-root pot, greenhouse-grown when planted. Foliage variegated green and cream, and has the appearance of being sickly. Growth poor; hardy. Ignoring season of planting as not fair test, no bloom was obtained in three seasons. Discarded.

William Notting, HT.** Stock, two-year-old greenhouse-grown when planted. Large, full, fine form, fragrant, long stem. Sufficient, healthy foliage. Growth average; hardy. Bright rosy cerise with deeper center.

Year	Blooms per plant (1 plant)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	1	1	1	0	1	0	0	0
1919.....	OR	1	3	2	5	3	6	2	1	1
1920.....	OR	2	5	9	3	3	5	4	2	0
1921.....	OR	1	4	8	6	2	7	4	4	2

Wm. R. Smith, HT.** Stock, three-year-old field-grown plants when records were started. Large to extra-large, fine form, full, quite fragrant, medium to very long stems. Foliage fine, sufficient. Growth vigorous, spreading. Silvery white and pink toned with peach-pink.

Year	Av. blooms per plant (3 plants)									
	Stock	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1918.....	OR	0	3	7	2	5	6	2	5	0
1919†....	OR	0	0	6	1	3	3	6	7	1
1920.....	OR	1	2	6	4	6	3	2	2	0
1921.....	OR	0	6	8	1	2	5	11	5	2
1922.....	OR	2	2	13	5	1	7	12	8	1

†Plants were burned to ground during previous winter.

Roses Registered in 1922

THE following roses have been registered with the American Rose Society in 1922. Under the action taken by the Executive Committee, April 22, 1920, the registration does not become permanent for three months from the date of first consideration, in order to allow full time for communication with the English and French rose societies, so that duplication of names may be avoided.

From Stuppy Floral Company, St. Joseph, Mo., June, 1922:

**Annie Laurie*, H.T. Sport of *Ophelia*. Type, Mme. Butterfly. Bud large, long-pointed; flower large, cupped, very double (46 petals); very lasting; flesh-pink, edges deeper, golden yellow base extending a third of the petal; borne on long, strong stem. Foliage abundant, large, rich glossy green, disease-resistant. Few thorns. Very vigorous (5 to 6 feet), upright, bushy; profuse and continuous bloomer; not hardy. Certificates of Merit at Minneapolis, Denver, and Omaha Flower Shows; Blue Ribbons at St. Louis, Minneapolis, and Council Bluffs.

From Woodland Park Floral Co., Sumner, Wash., October, 1922:

**Honeymoon*, H.T. *Ophelia* × *Sunburst*. Bud medium size, long-pointed; flower large, open, semi-double (26 petals), lasting; clear chrome-yellow; borne singly on medium length stems; strong fragrance. Foliage abundant, large, leathery, dark green, disease-resistant. Few thorns. Vigorous, bushy, compact; abundant and continuous bloomer; hardy.

From The Montgomery Company, Hadley, Mass., August, 1922:

**Commonwealth*, H.T. Bud large, long-pointed; flower large, open, double, very lasting; deep pink—solid color; borne singly on medium-strong stem; moderate fragrance. Foliage sufficient, leathery, medium size, rich green, disease-resistant. Few thorns. Vigorous, upright; continuous bloomer.

From Cottage Gardens Co., Queens, L. I., N. Y., August, 1922:

**Humboldt*, H.T. *Ophelia* × unnamed seedling. Type, Mme. Abel Chatenay. Bud medium size, long-pointed; flower medium size, high-centered, double, very lasting; bright rose-pink; borne singly on long stems; moderate fragrance. Foliage sufficient, medium size, glossy bronze-green, disease-resistant. Few thorns. Vigorous, upright; profuse and continuous bloomer; hardy.

From Joseph H. Hill Company, Richmond, Ind., October, 1922:

**Sensation*, H.T. *Hoosier Beauty* × *Premier*. Type, *Hoosier Beauty*. Bud very large, long-pointed; flower very large (5 inches across), open, double (36 petals), very lasting; borne singly on long, strong stems; moderate fragrance. Scarlet-crimson, with maroon markings (like Chateau de Clos Vougeot). Foliage dark green. Free branching; profuse bloomer. (See colored Frontispiece.)

From Albert F. Amling Company, Maywood, Ills., November, 1922:


Bride's Blush, H.T. Sport of *Columbia*. Bud well formed; flower of good shape (26 petals), fine texture, lasting; creamy white, at times turning to beautiful blush-pink; moderate fragrance. Foliage good, disease-resistant. Few thorns. Vigorous, upright; profuse bloomer.

From A. N. Kinsman, Inc., Austin, Minn., November, 1922:

Galli-Curci, H.T. Sport of *Columbia*. Bud long-pointed; flower well-formed (32 to 39 petals), golden yellow, lasting; borne on long, strong stems; moderate fragrance. Foliage glossy dark green. Vigorous; free bloomer.

Rose Notes

GATHERED BY THE EDITOR

 These Rose Notes are not to be valued less because of their brevity, but rather more, for they are the terse, succinct, condensed experiences of active amateurs all over America. It is the Editor's deep regret that the necessary one-pound mailing limitation—necessary to enable the American Rose Society to "keep house" financially, despite much free work done for it—prevents the publication of many more of these live experiences.

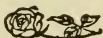
The Staying Qualities of Hybrid Tea Roses.—In the spring of 1915 I planted forty-five varieties, three each, of Hybrid Teas. This summer of 1922, thirty of them are in their eighth season of bloom and in good condition.

Any Hybrid Tea that withstands the vicissitudes of our climate and smilingly gives forth its bloom for so many seasons is entitled to be placed upon the honor-roll. Of course, they have received the proper winter protection, easily given, but their presence with me now, and the thrifty condition they are in, and their future promise show that they have a stable constitution and should be included in all collections. In listing their names I have included the average number of blooms per plant given during the season of 1916. The remaining fifteen varieties of the original forty-five either winter-killed or were discarded for various reasons.

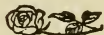
ROSES PLANTED AT EGANDALE, MARCH 31, 1915, AND AVERAGE BLOOM PER PLANT IN 1916

Mme. Caroline Testout, 25
Duchess of Wellington, 30
Earl of Warwick, 16
Ecarlate, 118
Farbenkönigin, 18
Florence Pemberton, 30
General MacArthur, 22
Grossherzog Friedrich, 45
Gustav Grünerwald, 23
Killarney, 53
Lady Alice Stanley, 24
Lady Ashtown, 34
Lady Pirrie, 20
Lady Ursula, 30
Louise Catherine Breslau, 10

La Tosca, 45
Laurent Carle, 19
Lieutenant Chauré, 22
Mme. Edmond Rostand, 11
Mme. Jules Bouché, 16
Mme. Leon Pain, 23
Mme. Mélanie Soupert, 15
Mrs. Aaron Ward, 31
Mrs. Arthur Robert Waddell, 32
Mrs. Wakefield Christie-Miller, 14
Ophelia, 35
Pharisaër, 28
Radiancé, 42
Viscountess Folkestone, 26
Willowmere, 22



A Yellow Columbia.—From Austin, Minn., A. N. Kinsman, Inc., report a yellow sport of Columbia which may easily be a rose of notable value. It is described so far as "a clear yellow, of good size, and on a plant with good foliage."

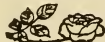


Another Test-Garden?—The underwriting of certain extensions of Butler University, Indianapolis, Ind., by the Sage Foundation, and the energy and foresight of J. H. Nicolas, an enthusiastic member of the American Rose Society, resident in that city, bid fair to make possible a rose-test garden there, but a few miles from the geographical center of population of the United States. Mr. Nicolas, as president of the Garden-Flower Society of Indianapolis, has proposed for Butler University a department of floriculture, arboriculture, landscape architecture, and city planning in connection with a botanic test and research garden, including the very desirable central rose-test garden.

The Passing of a Great Congressional Rose-Lover.—In the death, on November 30, 1922, of James R. Mann, who has for twenty-five years represented Chicago in the National House, the nation lost more than a statesman of ripe constructive ability. Mr. Mann was best known because he was for many years the Republican floor leader, but those who came to know him as peony fancier and rose-lover, who had with him the genial and delightful intercourse which characterizes plant-lovers, thought him even greater in his garden devotion.

Mr. Mann maintained a large garden in Chicago, and it was one of his characteristics that each year he would give away quantities of peony roots of the best character to stimulate in others the love of gardens.

Mr. Mann was a member of the American Rose Society's Committee on a Rose Show Garden for Washington, and had been in active consultation with that Committee, bringing it into contact with the authorities in Washington looking toward the execution of the superb plan prepared for such a garden by another member of the Committee, Mr. Frederick Law Olmsted. His effective relation to all congressional matters would doubtless have made this garden a certainty within the next year or two. For this and for many other reasons, the American Rose Society deplores his death in his sixty-sixth year.



Experiences with Janet and Rose Marie.—In a letter to the Editor from W. DeP. Knowlton, of Youngstown, Ohio, that gentleman calls attention to the extreme desirability of such definite and accurate reports on roses in various parts of the country as will guide amateurs who are provoked by the miscellaneous adulation in the catalogue descriptions without any special recommendations for locations or qualities. Incidentally, the Editor joins in his commendation of both the roses mentioned.

Concerning Janet, Mr. Knowlton writes: "When I was conning the different catalogues a year ago I was somewhat attracted to the rose Janet. My success with it has been most gratifying. The plants grew wonderfully and bloomed abundantly, having healthy and disease-resistant foliage. The blooms were of good form, size and color, and several of them in bouquets with a like proportion of Radiance blooms, were the delight of all who saw them. In view of the fulsome praise in the catalogues of other varieties which in my garden did not bring anything like the satisfaction this Janet did, I am curious as to this modesty about a good rose.

"My other experience relates to my choice of Rose Marie on the claim in one of the catalogues that this was unquestionably the finest rose of its color for the outdoor garden. I planted Rose Marie near three Columbias and three Premiers, but for me Rose Marie so far outclassed them that I cannot but place these other two much vaunted roses on probation."

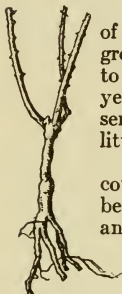
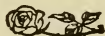


A Canadian College Rose-Garden.—Prof. A. H. Tomlinson, of the Ontario Agricultural College, which is maintained at Guelph, Ontario, Canada, writes in regret that that institution was not able to plant an expected rose-garden in 1922, but adds: "By next spring we shall very likely have a college rose-garden—at least a beginning."

Very valuable data to promote extended rose-growing could be had from a well-managed Canadian test-garden.

Roses in Scientific Climatic Studies.—Dr. A. D. Hopkins, Forest Entomologist in the Department of Agriculture, whose studies of the relation of climate to world distribution of plants, animals, and agriculture have had such an immensely beneficial influence on the food we eat, is the author of what is known as the “bioclimatic law.”

To continue observation and research, a bioclimatic station has been established in West Virginia, where there will be consideration of local adaptation and zonal distribution of wild and cultivated plants, including common and widely distributed varieties and species of roses and iris. From these continued studies it is probable that a twofold advantage will result: We will come to know more about the habits and qualities of more roses and more about the relations of climate to plant-life. Dr. Hopkins is an enthusiastic rose-lover and a member of the American Rose Society.

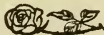


Rose plant with roots mutilated by careless digging.

Trying to Grow Roses without Roots.—The enclosed picture* of a rose bush is a fair sample of the bushes I receive from most of the growers. I believe their idea is to cut off most of the roots and tops to make a well-balanced plant, and the buyer can hustle for the next year trying to make it live. I am unable to understand why a nurseryman will spend so much time in carefully growing his stock, and little, if any, in digging.

This plant was received from one of the largest growers in the country, was well packed, and evidently was a good husky bush before digging. It now has but a slight chance of living, regardless of any care I can give it. If it survives it will be fully a year before it will be as good a bush as when dug. Please have the growers give us all the root-growth they can and there will be few that will die if given proper care.—G. P. MCKINSTRY, *Americus, Ga.*

[The Editor hopes the growers of outdoor roses will take notice of Mr. McKinstry's complaint. It is senseless to grow good roots, and then leave them in the nursery row through careless or stupid digging.—EDITOR.]



A Harison's Yellow Hedge.—I am vastly proud of my hedge of Harison's Yellow, and I wish you could see it. It extends for sixty feet all along the driveway on a rather steep hill, then jumps across the lawn and takes possession of a little mound or bank about six feet high which it has completely covered. The plants on top of the mound are about eight feet high, and their bases are hidden by the canes growing lower down. This mound is a miracle of soft yellow when they bloom, and the glory lasts for about two weeks. The whole collection or colony has sprung from one rather puny old plant which was established for Heaven knows how many years on the place when we bought it about fifteen years ago. Incidentally, there were fifty-six seed-pods on the Harison's Yellow plants this year, the largest number I have ever known. The Rugosas, Multifloras, Sweetbriars, Spinosissimas and others were in full flower with the Harison's Yellow this year, and that accounts for the heavy crop of seed.—G. A. STEVENS, *Mineral City, Ohio.*

* It has been accurately redrawn as here shown.—EDITOR.

Making the Wilderness "Blossom as the Rose."—Miss Carrie Harrison, of Brookland, D. C., writes: "There are more than a million rose seeds wasted in this country every year, and every one bears within its coat a potential rose bush. There may be among these wasted millions a peer of Radiance, America, or Los Angeles, and there may be dormant in those seeds a stock better for use than the Dog rose of Europe or the Multiflora of Japan.

"Walking one day with Dr. Van Fleet, in the last year of that good man's work, at Bell through his rose-gardens, I filled my pockets with the beautiful hips from the roses we passed. From these I gave Mrs. Gamble a small handful and she has now more than five hundred sturdy plants as a result. In 1921 I went over the same field and gathered more rose hips, gave Mrs. Gamble some more seeds, and now she has at her place at Windover more than a thousand thrifty rose bushes which will bear blossoms this year.

"I write this hoping that many will gather rose seeds and grow plants from them."

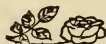


The Working Value of Municipal Rose-Gardens.—It was probably the experience in Hartford's notably successful Municipal Rose-Garden that led park executives to the realization of the efficiency of the area so devoted in promoting the recreational aims of a park. It should be explained that experienced park authorities evaluate various park utilities, extensions, and developments in proportion to the number of people per acre found to use them. Under this consideration the great garden in Elizabeth Park was found to possess the highest park intensity.

At the meeting of the American Institute of Park Executives held in Minneapolis, August 19, 1922, attended on behalf of the American Rose Society by President Pyle, there was further discussion of this subject, ending in the unanimous passage of the following resolution:

WHEREAS, experience with municipal rose-gardens has proved their possibility and popularity far in excess of proportionate cost, therefore be it

Resolved, that we recommend that every park board in affiliation with us, which has not already adopted this standard, shall give earnest consideration to the development of a rose-garden as a unit of recognized importance in their system.



Gloire de Dijon Hardy Near New York.—An incidental letter of inquiry from a member on Staten Island carries the information that this splendid old Noisette rose had prospered in a climate usually supposed to kill it. The story comes from W. Chester Freckelton, as follows:

I planted my Gloire de Dijon, April, 1921, and had a few blossoms the first season. Last winter, having read it was not hardy, I took care to have it well protected by earth and manure. I had planted it in a sheltered place formed by the ell of our house. Last spring it not only grew vigorously but blossomed in quite a profuse manner.

The Editor well remembers a great plant of this splendid rose which for many years decorated a sheltered western wall in Harrisburg, but which eventually froze in a severe winter. Accounts have come from other directions showing that Gloire de Dijon has flourished for some years and then has succumbed. This prompts the making of the point that it is worth while, because it is so beautiful and so different, to grow this good rose in sheltered northern locations, expecting that it will pay for itself in several seasons and then when it does freeze no sense of injury will result. Nothing else quite takes its place in beauty.

Hardiness of the Van Fleet Roses.—It has been somewhat thoughtlessly asserted that the superb climbing roses for which the late Dr. W. Van Fleet was responsible are not hardy in the New England States. The 1922 Referendum on favorite climbing roses shows that in Maine, New Hampshire, Massachusetts, and Rhode Island the three that stand at the head of the "Favorite Dozen" are Dr. W. Van Fleet, Silver Moon, and American Pillar, so there is no suspicion that these are not hardy. (Incidentally, Plate VI, facing page 73, shows the beauty and effectiveness of Alida Lovett in the Editor's garden.)

But direct testimony comes from Mrs. Moses Lyman, who lives in Longmeadow, Mass., a suburb of Springfield. Mrs. Lyman is a sister of the late Dr. Van Fleet, and she writes as follows:

The roses in my garden originated by my brother are Dr. W. Van Fleet, Silver Moon, American Pillar, Alida Lovett, and an unnamed seedling he brought to me in 1920 when he visited here in January of that year. It is semi-double and a rich deep velvety red, very hardy and beautiful. For the want of a better name I call it "My Brother's Rose." It was heeled in after it came, planted in the spring, and it climbs on the garden fence.

I have the Dr. W. Van Fleet rose on the arch above the gateway, and Silver Moon and Alida Lovett on the fence, with American Pillar on both sides of the front porch. The only care these roses have ever received is to have the old canes cut out about the middle of September and around the roots is banked some grass cuttings and rich earth. Those on the arch and fence are never disturbed, and they take our severe storms as they come and go. All have lived and blossomed freely.



No Blue Rose?—Newspaper scientists sometimes produce some weird and wonderful things, as evidenced in the following clipping from the *Philadelphia Record*:

Never a Blue Rose. Roses of almost every hue were displayed at the National Rose Society's summer show in the Botanic Gardens, London, but there was nothing approaching a shade of blue. The blue rose has often been sought, but has never been realized. This is in accordance with what one writer describes as a fixed principle in botany, that blossoms showing two of the primary colors will not enlarge into a third. As there are red and yellow roses there will never be a blue one.

If the gentleman who wrote this had gone to the trouble to look in any modern catalogue, he would have found that *Veilchenblau* is extant in this country, and that there were several other blue abominations in the shape of roses abroad.



Roses and Rose-bugs in Maine.—May I say that the "white zone" on the Rose Map published a few years ago in the *American Rose Annual* must have been placed in the state of Maine by error—or was it due to insufficient inking in the printing? I have been growing roses here for some fifteen years, and I have not found that the climate was destructive to them, or that any extra care was called for. For winter protection the plants have been pruned down somewhat in the fall and the beds covered with a very liberal coat of manure. No other protection has been given, and yet very few plants have been lost, except from the terrible winter of 1919-20, when there was no snow until February and a temperature of zero to -25° below for several weeks.

The care the roses have received is that of an amateur who has had to learn by hard knocks, as I have found that books are so contradictory and individual, so general and incomplete in statement that if you avoid Charybdis you are certain to go to wreck on Scylla. Consequently, if my roses have prospered in Maine—and they have—it cannot be that Maine is at fault when accused of being unsuitable for roses. The location where the roses are is the border of a

lake, and they are thoroughly protected on the north and northwest by extensive pine and other woods. Originally the soil was sand, mixed with stones of every size—pebbles to large granite boulders—resting on hard-pan at a depth of twelve inches to two feet, in fact, soil such as would be constituted by an old glacial moraine. By means of vegetable mold, loam, and manure it has become a quite respectable sandy loam resting on the hard-pan. But the pebbles and small rocks are still with us, no matter how many are picked up and disposed of every year.

All my roses are Hybrid Teas—Teas are too tender for here—and bloom abundantly. I have Druschkis which are perfectly sound and have survived thirteen winters. Among the roses I have growing I would mention Lieutenant Chauré, Radiance, Mrs. Aaron Ward, Mrs. Wakefield Christie-Miller, Etoile de France, Mrs. Franklin Dennison, the red and white Killarneys, Mrs. Ambrose Ricardo, Queen of Fragrance, Sénateur Mascaraud, Mrs. John Laing, Mary, Countess of Ilchester, Jonkheer J. L. Mock, Duchess of Wellington, George C. Waud, Laurent Carle, Chrissie MacKellar, and the like.

Now I would like to mention a curious experience I have had with rose-bugs, and I will give it for what it is worth. Some five years ago black-spot was unfortunately brought in by some nursery plants. I combated it systematically with powder of sulphur and arsenate of lead, dusting not only the plants but the ground also. Every year since the dusting has been begun, the last thing before winter and the first in the spring, has been a thorough and intensive dusting of the dormant plants and the *ground* with the powder. Now it is curious that progressively with every year of the five, there has been a steady diminution in the rose-bug visitation, and in this year (1922) they were so negligible in quantity that it was not worth while to give the time or to take the trouble to pick them. As I said, I give the experience for what it may be worth, without making any deductions or drawing any conclusions.—GEORGE T. ELLIOT, M.D., *East Otisfield, Maine.*



George Washington as a Rose-Grower.—At Mount Vernon, so tradition states, George Washington grew a *Setigera* seedling. Whether he deliberately crossed it we do not know, but if he did he was the first rose-breeder of America. If it was a natural cross then he was a keen observer, for the result, the Mary Washington rose, is in commerce today.

In 1834 the Horticultural Society of Maryland awarded to Samuel Feast, of Baltimore, a silver medal for one of his seedlings—probably Baltimore Belle, yet in commerce. This seemingly was the first medal given in America for rose-growing. I am sending the Editor a photograph of it as yet preserved.—MISS CARRIE HARRISON, *Brookland, D. C.*



Winter Roses in Florida.—When we arrived at Camp Walton, Fla., December 20, 1922, many of the roses were in bloom and had been for a large part of the summer and autumn. Among those which have continued to blossom since the above date are the following, named in the order of profusion of flowers produced throughout January: Frau Karl Druschki, Banner, Paul Neyron, Freiherr von Marschall, Mlle. Franziska Krüger, White Maman Cochet, Maman Cochet, Bon Silene, Etoile de Lyon, Mme. Jules Grolez, Mme. Lambard, Mireille, Blumenschmidt, and Amelia Cook.—MARY L. CREIGHTON.

Rose Activities in Australia.—The Annual was promised this year an account of his hybridizations by Mr. Alistar Clark, of Glenara, Bulla, Victoria, but that gentleman found it impossible to prepare the material, as he cabled the Editor in January. Mr. Clark is working with extreme care, and evidently with original ideas, toward better roses for Australia.

Elsewhere E. H. Wilson, Assistant Director of the Arnold Arboretum, tells of what he found in Australia in the way of roses. (See page 118.)

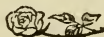
Mr. George W. Walls, of Melbourne, has been a steady correspondent for several years, and he has provided accounts of the shows held by the National Rose Society of Victoria, and the observations on new varieties made by Mr. Cronin, the Director of the Melbourne Botanical Gardens. We are informed not only that the National Rose Society of Victoria has now "500 enthusiastic members who are keenly alive to the pleasure to be derived from the growing of roses," but that in the Botanical Gardens of Melbourne "there have been established testing-beds for the new imported roses as well as for the new local creations." The list forwarded indicates that while our friends on the other side of the globe have all the varieties with which we are working, in addition there are mentioned Mrs. R. C. Dell, Gwen Nash, Ma Cherie, and Midnight Sun as of Mr. Clark's production in Australia. The latter is said to be "semi-double, rich dark crimson in color, and a good grower. It will probably oust K. of K."

The Australia rose climate varies, but we are told that "the whole of this state of Victoria is very favorable to the more delicate classes of roses. There is no record of the soil having been frozen in the least degree during the past seventy years, though at times temperatures up to 108° Fahr. have been reached."

At Mr. Clark's notable garden a rose gathering was held on October 24, which would correspond to June in the United States. At this gathering was shown a new Hybrid Tea called Lorraine Lee, described as being a dwarf grower with semi-double, beautifully cupped blooms freely produced on long stems amid plenty of mildew-proof foliage. The flowers are the color of Mme. Edouard Herriot, but superior to it inasmuch as it lasts even in the hottest weather.



Birds Enjoying the American Pillar Rose!—An early spring letter from Mrs. Moses Lyman, of Longmeadow, Mass., sister of the late Dr. W. Van Fleet, tells this interesting occurrence: "We had a very severe ice and snowstorm which sealed the ground and encased the trees and shrubs with a thick covering of ice, so the robins, song sparrows, bluebirds, and many others, including a pair of thrushes, were foodless. To our surprise and joy, they came to the front porch and ate the American Pillar hips that had been so cheery all the winter as we looked through and beyond from our living-room windows. Fortunately, the vines were heavily laden, and, protected by the roof, the birds could eat all they needed until we could prepare other food for them."



The Rose in a Church Service.—At the triennial General Convention of the Episcopal Church in Portland, Ore., in mid-September, a rose service occurred under the auspices of the Royal Rosarians. Every one entering was presented with a rose, and there were speeches by the Governor of Oregon and by the Mayor of Portland.

Why Not Use the Bourbon Blood in Hybridizing?—This is the question raised by J. H. Nicolas, of Indianapolis, Ind., who calls attention to the superb quality of the old *Souvenir de la Malmaison* and to the fact that it has not been used in breeding. He reports an incidental seedling borne on *Souvenir de la Malmaison* fertilized by either *Seabird* or *Lemon Queen*. This he has named *Lucy H. Nicolas*. Of it he says, "The foliage and growth habit are the same as *Malmaison*, and the flower has the same beautiful opalescence but with a marked yellow tinge which is more pronounced in the bud, though remaining lemon-yellow at the base of the petals after two days of torrid sun."

Mr. Nicolas very properly raises the question as to why the hybridizers are neglecting the opportunity to get everblooming quality and opalescence into roses through the use of *Souvenir de la Malmaison* and other Bourbon roses.



That Model Back-Yard Rose-Garden.—In the 1922 Annual, on page 32, Paul A. Kohl described and presented a diagram of the model back-yard rose-garden maintained in the Missouri Botanical Garden. The description showed that the garden is surrounded by a hedge of California privet. Objection was made by W. A. Morgan, of Vicksburg, Miss., that under a similar arrangement he and several of his friends had found "in the course of about five years that the privet roots practically destroyed the rose-beds."

Mr. Morgan's clear statement was referred to Mr. Kohl, who, speaking of the St. Louis garden, says: "Digging along the hedge in the rose-garden in question I find that the privet roots do not extend into the beds more than one to one and a half feet. No rose in this garden was planted closer than two feet from the base of the hedge. Not a single plant has needed to be added to this back-yard rose-garden since its establishment five years ago. . . . Our experience has not shown that a hedge of privet in close proximity to beds of roses is detrimental to the plants when the beds are properly fertilized each year."

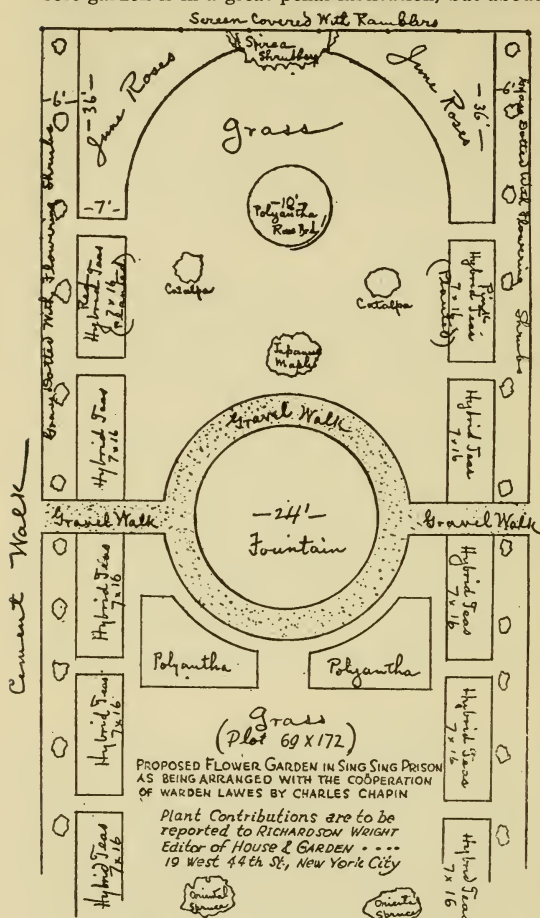
Elsewhere, in Plate XIX facing page 184 is shown a picture of this back-yard garden at the bloom-time of 1922. The Editor suggests, nevertheless, that his practice, which is to have a sharp spade thrust down to a full foot of depth well on the inside of any hedge near roses, is the best way to be sure—and it won't hurt the privet!



Roses in Mississippi.—Out of seven trials with Los Angeles, I have had only one satisfactory plant, and it took years to get that one started. All the Killarneys seem entirely suited to this section, and this is also true of Mme. Caroline Testout. I have found *Radiance*, especially *Red Radiance*, to be by far the most active and satisfactory bloomer in our climate. I have one two-year-old bush that produced 171 blooms last year, none with less than twelve-inch stems, and not one of my *Radiance* plants produced less than 120 blooms. *Jonkheer J. L. Mock* is also very satisfactory, as are *Lady Alice Stanley* and *Lady Ashtown*.

Among the climbers, the *Climbing Lady Ashtown* has provided more flowers than any other, although the foliage is subject to black-spot. We can have here an almost continuous bloom from the above roses ranging from April to December by fertilizing with fresh cow-manure every three months. We scrape away with a hoe a bowl-shaped depression about two feet in diameter and four inches deep around the rose, and, after filling this with fresh cow manure, cover it with a little fine earth.—W. A. MORGAN, *Vicksburg, Miss.*

A Rose-Garden in Sing Sing Prison.—About the last place to look for a rose-garden is in a great penal institution, but about the best place to find one



would be in such a place. The diagram opposite shows a plan for a "proposed" garden which will be an actual fact in the spring of 1923. The story of its establishment, and possibly some progress photographs, will have to wait for the 1924 Annual, but the fact of the garden is now made known for the information, and it is hoped the inspiration, of members of the American Rose Society.

Through the courage and fine spirit of Charles Chapin, an uncriminal life inmate (so the Editor believes!), and under the hearty co-operation of the warden, Mr. Lewis E. Lawes, a plot of ground within the prison enclosure, some 69 by 172 feet, has been carefully prepared, and the marked ornamental shrubs and trees have been planted through the co-operation of Mr. F. R. Pierson, a member of this Society.

The Editor's attention was drawn to the situation quite incidentally. Correspondence with Mr. Chapin eventually brought out his

hopes and the possibilities. Since that time, the opportunity to participate has been offered to a few favored members and friends of the American Rose Society, and in every case has been eagerly accepted. In the 1924 Annual it will be possible to publish a list of these kindly helpers.

Rose selections have been made with the idea of having much bloom in sight during the growing season. Mr. Chapin, who was city editor of a prominent New York newspaper for twenty years, is well-acquainted with roses, and with the sympathy and help of the authorities will probably make an extremely attractive garden. Anyone who has ever visited a great penal institution



PLATE XIX. The Model "Back-Yard Rose-Garden" at the Missouri Botanical Garden, St. Louis, Mo., in June, 1922. (See page 183.)

can imagine the literally enormous contrast between the surroundings ordinarily met with and those that will be spreading the gospel of the rose before this group of unfortunates as these plants, contributed through and by the American Rose Society, come into their fine work. Perhaps other prisons can also be "rosified."



"Some Growth" on a Silver Moon!—I would like to call your attention to one of Dr. Van Fleet's roses. In taking it down off the rose-rack today I measured this year's growth of new canes. One cane measured $2\frac{1}{8}$ inches in circumference at base, and was 24 feet long. Another one was $2\frac{3}{4}$ inches at base and 23 feet long. The total growth of all laterals and canes this year, on this one rose, was 261 feet! This rose was the Silver Moon.—G. C. DUGGAN, *Springfield, Ills.*



A New Jersey Bloom Record.—Mr. A. A. Styvers, of Caldwell, N. J., adds to the value of this Annual by furnishing a bloom record covering two years for the same seven varieties, which is here printed:

	1920			1921		
	Bushes	Blooms	Average	Bushes	Blooms	Average
Radiance	8	263	33	8	269	33
Red Radiance	9	244	27	9	286	31
Mme. Butterfly	8	155	19	9	194	21
Columbia	8	104	13	9	117	13
Hoosier Beauty	8	93	12	9	64	7
Golden Ophelia	5	43	8	11	133	12
Hadley	8	57	7	8	60	7



The Puget Sound Rose-Heaven.—Thirty years of close confinement at my profession back in old Pittsburgh, followed by ten years here at the same work, where all that is beautiful is just outside the window, warrants me, I think, in my firm belief that the Puget Sound region is the one choice spot of the United States for developing big, healthy, and luxuriant rose bushes and for bringing them into the most attractive bloom.

Here the climatic conditions throughout the year are just what the rose seems to need. This statement applies to nearly every variety, including Teas, Hybrid Teas, Hybrid Perpetuals, and the like. Even the loved Maréchal Niel of the far South will here, in a southern exposure and with only house-wall protection, live on, as it has flourished through ten consecutive winters outdoors. All the finer Hybrid Teas grow here to prodigious size. In the early winter, when blooming ceases, branches a foot long, and thick as a fountain pen, may be clipped, and these, stuck two to three inches into the ground, which remains unfrozen all winter, will be ready for rooting and growing on in the spring.

My best sport is to bud the more delicate Teas in August on the new lateral shoots of the native Dog and Sweetbriar roses, which grow by the acre here, clogging valley pastures and swales. Indeed, in some places close to high tide, the roots of the Dog rose actually reach out and suggest that there is enjoyment of an occasional dip of salt water.—HIRAM DEPUY, *Tacoma, Wash.*

A Rose-Hip Confection.—Roses are not only good to see and to smell, but their hips are good for food. A fine old lady of eighty-two years told me recently of her trip seventy years ago with her parents over the Oregon trail. In Montana their oxen were poisoned by eating laurel. Delayed and without supplies, they lived three days on wild rose hips, then joining themselves to a passing emigrant train. Perhaps it was because of this encouragement that I have developed the *Rugosa* hips into a confection which the Editor has admitted is altogether delightful. I subjoin my process:

Rose-Apple Glace. For making rose confections, the hips of the *Rugosa* roses are preferred because of their large size, early coloring, thick, meaty flesh, and their immunity from parasitic blemishes. They are in fine color for a considerable period before the silky fibers develop next to the seeds, and should be gathered at this time. The candying process is as follows: With a sharp knife, cut transversely the upper one-third of the fruit and discard it—the blossom end. With a spoon-like tool or instrument remove the seeds, using care not to crush the globular fruit. The stem end is then cut out by a circular incision of a sharp penknife. Wash the fruit in a colander, and put in cool place for three days to dry; then make a sirup of one cup of granulated sugar, adding $\frac{1}{3}$ cup of water. Boil until a brittle thread can be drawn from the sirup. Then dip the dried hips, a few at a time, into the boiling hot sirup, spread them on waxed paper, and when moderately cool, roll in powdered sugar. They are now ready for use or packing, and retain their delicate flavor and sweetness indefinitely.—HIRAM DUPUY, Tacoma, Wash.



Roses in South Africa.—From a member of the American Rose Society living in Cape Province there has been received the following account of rose conditions there: "South Africa has varying climatic conditions. On the coast it is fairly moist everywhere, while inland it is more or less dry. Nearly the whole of South Africa has a summer rainfall, the only part having rain in winter being the southwestern portion, round about Cape Town, and a little distance away from it.

"Roses do not flourish as luxuriantly in the winter rainfall area as they do in the summer rainfall area. Also, they do not grow as perfectly near the coast as they do inland.

"I have seen Dorothy Perkins, American Pillar, and Hiawatha, grown both as hedges and arbors, such as I have never dreamed possible, but then this has been at an inland center which has a fine hot climate and excellent soil.

"Roses in the moist coastal parts are very much subject to mildew, red scale, and similar diseases, while inland these troubles are negligible.

"Many varieties of roses grown inland are impossible to grow near the coast. Consequently some of the best varieties have to be left out by coastal growers, while with much trouble it is possible to keep a rose-garden going. . . ." —E. C. ROBERTS.



Getting Rid of Worms.—In the last three years I have purchased about \$15 worth of roses from one of our largest firms, and to date I have growing two young plants, and those I purchased this year. The plants when received were good, healthy-looking specimens, and did well for a few weeks, then began to drop their leaves. After a few weeks the stalks dried up and the plants died. I keep a spray-gun always loaded for lice and worms, and I carefully looked over

the roots after the plants "took sick," also after they were dead, but could find nothing to indicate the cause of their demise. Last winter I took in five young rose bushes that I had rooted, hoping to ensure their surviving the winter. They grew splendidly until March, when they began to sicken the same as the outdoor ones had. I closely inspected the earth around the plants and found it covered with little particles of soil, round, elongated, and about as large around as a needle, which made me conclude that some worm or burrowing insect had attacked the roots. I made a good strong solution of lime-water and poured it on the earth—saturated it, in fact—around the roses. It brought to the surface a large number of small worms (color of an earthworm) about as large around as a pin and half an inch or so long. They wriggled a few seconds and gave up the ghost. I saved one of my five roses.

This spring I set out four roses which I had purchased. They did well for two months, then began to sicken. I never thought that outdoors, in open earth, there could be anything the matter with the roots, but after two of them were dead, in July, I applied slaked lime to the soil around the rose bushes and watered copiously, with the result that one of my young roses has grown about eight inches since being treated and the other one is looking green and healthy and putting out new shoots. I have no doubt but that the greater part, if not all of former losses, were due to this cause.—HENRY H. BRANCHAND, *Rutland, Vt.*



A National Garden Week Established.—To Mrs. Thomas G. Winter, President of the General Federation of Women's Clubs, President Harding, on January 16 last, addressed a cordial note of approval of the programme of the General Federation for a National Garden Week this spring. He continued: "The benefits both to individuals who take part and to the community as a whole are so obvious that they seem hardly to require enumeration."

This National Garden Week is planned for April 22-28, and for it a notable programme has been drafted, beginning with a proper Sunday suggestion and proceeding through the week with discussions of gardening in all its phases, including home and community gardens and work in the schools. Parks, playgrounds; tree-planting; gardens around various institutions, such as hospitals; the improvement of school grounds; the relation to the work of the Department of Agriculture—all these are part of the programme. Friday is given over to talks and exhibits covering literature, song, story, etc., but Saturday is to include as the Children's Day, pageants, plays, exercises, and probably the garden in the movies.

Every member of the American Rose Society is urged not only to participate in Garden Week, but to see that the rose gets its share of the attention that is possible to give at that time. Additional details could probably be had of the *Garden Magazine*, Garden City, New York.



Protecting Climbing Roses in Michigan.—I believe people in Detroit never take down climbing roses supposed to be hardy; but they are much further south than Alma. As for myself, I would no more think of not taking down and covering each December, than I should of letting the furnace fire go out for the winter at that time. Everybody laughs at me here for doing this, but a cold winter is due now, and theirs will die while mine will not. We take them down, coil them, cover with straw and leaves, then lay burlap over that, held down by bricks.—MRS. FRANCIS KING, *Alma, Mich.*

A Great Rosarian Gone: The passing of M. H. Walsh.—The calendar year of 1922 saw the passing of two men who had each exercised a profound influence on outdoor roses in America and in Europe. Before the 1922 Annual went to press, the death of Dr. W. Van Fleet occurred, and in the month after it appeared, Michael H. Walsh, of Woods Hole, Mass., on April 10, died. He was of ripe age, having passed his 74th birthday. Born not far from Chester, in England, and beginning his garden work when but eleven years old, he came to America in 1868, bringing with him to Boston as a young man a predisposition toward rose culture.

After two gardening experiences in Belmont and in Brighton, Mr. Walsh settled within the same state, at Woods Hole, where he took charge of the extensive estate of Joseph S. Hay, and began his intensive work toward the production of better climbing roses.

Meanwhile, Mr. Walsh grew these roses out of season wonderfully. Never will the Editor forget the exquisite beauty of a plant of the lovely white trailer, Mrs. M. H. Walsh, exhibited at one of the earlier New York flower shows. Its long, flexible, pure white twigs depended from a top-worked plant some six feet high, and it was a shower, a cascade, of chaste beauty.

But the enduring, living, blooming, glowing monuments to Mr. Walsh's hybridizing genius are all over America and Europe, in the hardy climbing roses he produced. With *Excelsa* taking the place of *Crimson Rambler*; with *Hiawatha*, *Paradise*, *Evangeline*, and *Milky Way*, the "Walsh Quartette" of single loveliness from deep scarlet-crimson to pure white; with *Lady Gay* and Mrs. M. H. Walsh in daintily double flowers; with all this of plus quality in vigor and hardiness, we have reason long to remember the quiet worker of Woods Hole who never sent out a rose he did not believe in.

The "Official List of Roses Introduced in America" credits M. H. Walsh with 42 varieties, of which barely a half-dozen have been dropped from commerce.

His success, and that of Dr. Van Fleet, ought to assure young American rose workers that we can do things in roses in America. Working to one ideal, testing, always advancing, Mr. Walsh had made his rose mark on the world.

It is singular to note that the new French climber, *Ile de France*, now being much talked of abroad, unites the work of the two great American originators of climbing roses, for Mons. Nonin credits it to a parentage of Dr. Van Fleet's American Pillar and Mr. Walsh's *Hiawatha*.

The American Rose Society is much the loser in Mr. Walsh's death. He gave it consistent support and to him it awarded, on a basis of pure merit, its highest honor, given so far but twice, the Hubbard Gold Medal, which went to *Excelsa* in 1914, as well as other medals for other roses of high merit.



One Thankful Man.—Members of the Committee of Consulting and Advising Rosarians of the American Rose Society constantly respond to requests for information, and just as constantly fail to be thanked, alas!

Mr. W. C. Egan sends to the Editor a letter which proves a pleasant exception to the rule. It is an acknowledgment from the Superintendent of the Rockford Park District, of Rockford, Ills., to whom Mr. Egan has given his usual witty as well as careful attention, and is in the following words:

"I received your very interesting letter and thank you for your painstaking description for planting, cultural directions, and list of roses. I appreciate very much your giving my inquiry thorough thought, as expressed in your letter, and feel assured that if we fail to succeed in our new rose-garden at least we will have but ourselves to blame for it."

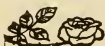
New American Rose Books.—The year 1923 is marked, and the notable rose advance of America emphasized, by the appearance of several new books on the rose. Aside from Capt. Thomas' excellent "Practical Book of Outdoor Rose Growing," revised in 1920, we have had no new rose books for some seven or eight years, and dependence has been had on the English works, none of them representing American conditions.

Mr. Robert Pyle, the President of the American Rose Society, issues this spring a new and enlarged edition of his "How to Grow Roses," of which thirteen previous editions have appeared. The current issue is a handsome book of 192 pages, including sixteen color plates. Mr. Pyle's wide knowledge and his lecture contact with rose audiences in many states have helped him to make an effective manual of rose culture. It sells for \$1.50, and may be had of the Secretary of the American Rose Society, or of the Conard & Jones Co., West Grove, Pa.

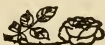
Mr. C. C. Sherlock, editor of the lively new mid-western magazine, *Fruit, Garden and Home*, has in preparation a rose book, of which details are yet unavailable.

The Garden Library of Doubleday, Page & Co., is to be enriched this spring by a new and thoroughly revised edition of its rose book, under the name of "The Amateur's Book of Roses." It will be a succinct treatise of some 188 pages, with many illustrations, and as it is in revision by the Editor of the American Rose Society, he can at least vouch for its sincerity and accuracy. It can be obtained at \$1.90 of the Secretary, or of Doubleday, Page & Co.

The Macmillan Co. announce the publication, March 15, of a new rose book, "The Rose in America," by J. Horace McFarland, Editor of this Annual, written from the different standpoint of eight years of close relation with rose amateurs in America and rosarians everywhere, and reflecting and summarizing high points in the successive issues of the Annual. Modesty forbids further mention of this new book, other than to say that it is of 245 pages, with some twenty full-page plates in color and sepia, and can be had postpaid for \$3 of the Secretary, of The Macmillan Co., New York.



The Park Value of a Rose-Garden.—At a meeting of the American Institute of Park Executives, including those who make and maintain the great public parks in America, held in August, 1922, in Minneapolis, Minn., the President of the American Rose Society made a strong presentation, and with notable effectiveness. The outcome was the passage by the Institute of the following resolution: "Every park in affiliation with this association shall give earnest consideration to the development of a rose-garden as a unit of recognized importance in the park system."



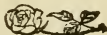
A Hugonis-Radiance Hybrid.—On Plate XVIII, facing page 169, are shown the first flowers, as they bloomed in June, 1922, in the Editor's garden in Harrisburg, of a hybrid made by the late Dr. Van Fleet between *Rosa Hugonis* and the splendid American Hybrid Tea, Radiance. The plant, quite small, came to the Editor March 30, 1921. The flowers show the mingling of the two lovely parents, but the plant is dominated by the foliage and thorns of Hugonis, and has its bushy, spreading habit. It seems a most pleasing hybrid, of great desirability as a garden shrub.

A California Success with Bicarbonate for Mildew.—As soon as the 1922 Annual was received I went through it looking for any articles on mildew. I had been using sulphur, as usual, but when I read of the bicarbonate of soda treatment, I mixed some and began spraying a Climbing Richmond that had had no sulphur on it this season. I sprayed it three consecutive mornings and once or twice afterward. The mildew seems to be completely under control, has not spread any further, and what was on it seems to be disappearing. I will continue to spray it occasionally, however, for a while yet. If this remedy will only prove as efficient in other cases, it will be of great benefit to Pacific Coast rosarians, for mildew is our greatest enemy. We had an extremely cold spring, with so many sudden changes of temperature that mildew had a fine chance for growth, and this is the first time in six years that I have had to fight it. I shall use it all through our rose-garden instead of sulphur, as it is not so unsightly and it reaches all parts better.—L. A. SMITH, *San José, Calif.*

[The mildew treatment mentioned by Mr. Smith was suggested to Jesse A. Currey by Prof. A. de Yaczenski, a Russian plant pathologist. It was to spray for preventing and for removing mildew with a solution of one ounce of sodium bicarbonate (ordinary baking soda) in one gallon of water.—EDITOR.]



A Novel Suggestion for Rose Advance.—Mrs. Joseph G. Walker, Vice-President of the Federation of Virginia Garden Clubs, has interested herself in proposing for that great state, with its variety of contour and climate "experimental stations for different parts of the state," which shall be used for "the growing and testing of roses for all-summer bloom in Virginia." Mrs. Walker has been advised of the possibility of conferring with the authorities of the Bureau of Plant Industry in Washington in relation to the necessary division into climatic zones, as in general was done in the preparation of the Rose-Zone Map, first published in the 1920 Annual. Other states might well discuss the same possibility to great advantage, and through the Garden Clubs it ought to be possible to have conducted comparative tests. The essentials would seem to be first, a separation of any state into zones of comparative similarity; second, an agreement to conduct a test in a certain city of varieties for, let us say, not more than twenty bush roses and twenty climbers; and, third, an arrangement for definite report of the findings.



Rose-Planting by Radio.—What is believed to be the first successful attempt to encourage rose-planting by radio telephone has been carried on this spring at Portland, Ore., the "Rose City." Through the powerful broadcasting station KGW, operated by the Portland *Oregonian*, a series of three lectures on rose-growing have been delivered by Jesse A. Currey, the Pacific Coast Director of the American Rose Society, and an amateur rosarian of Portland. The first lecture was given on February 12, 1923, and was devoted to the selection of good roses for garden cultivation. The second lecture, on February 19, presented the best methods of planting, and the third lecture, on February 26, covered the subject of pruning. The lectures, judging from the returns, which came from as far as Texas, covered a radius of about two thousand miles, and it is estimated were heard by at least 20,000 radio enthusiasts. This new method of spreading garden information, and particularly of promoting rose-planting, just at the time when people are thinking of getting their gardens in shape for the spring, is timely, and will, no doubt, have far-reaching results.

INDEX

- Alida Lovett, Hardy Climber, Plate VI, facing 73.
 Arctic Circle, Roses north of, 97.
 Australia, Roses in, 118.
 Australia, Roses of, 154.
- Bagatelle Rose Competition, 126.
 Baltimore, rose report from, 102.
 Barbier & Co., visited, 129.
 Barron, Leonard, article by, 14.
 Basic slag, information on, 49.
 Bautista, Mrs. Paz L., article by, 121.
 Beginning with Roses, 43.
 Black-spot remedy, 56.
 Bloom-record in Kentucky, 63.
 Bloom-record in Spokane, 96.
 Budding and grafting referred to, 56.
- California, Producing Rose Bushes in, 91.
 California Rose Conditions, Seeing, 85.
 California Rose Nursery, Plate VIII, facing 93.
 Charleston, W. Va., article about, 68.
 Choosing Roses Intelligently, 23.
 Clark, Alister, visit to, 119.
 Clark, Walter E., article by, 68.
 Collier, H. L., letter from, 100.
 Critical Period in Rose Development, A, 16.
 Currey, Jesse A., letter from, 99.
 Cut-Flower Situation, 107.
- Danville, Va., report from, 103.
 Dunning, D. M., garden of, 101.
- Emily Gray rose, referred to, 104; Plate XI, facing 120.
 English (Chelsea) Rose Show, 124.
 English Gold-Medal and Certificated Roses, Plates XV and XVI, facing 141 and 148; described, 144.
 European Rose Snapshots, Plate XIII, facing 132.
 European Rose Visits by Secretary, 124.
- Favored Roses of All America, The, 38.
 "Favorite Dozen" Bush Roses, Plate III, facing 24.
 "Favorite Dozen" Hardy Climbing Roses, Plate IV, facing 41.
 Fertilizing roses, new material for, 49.
 Finger-Lake Region, report from, 101.
 Forestier, J. C. N., article by, 132.
- France, Roses of, 150.
 Frau Karl Druschki in Dunning Garden, Plate X, facing 105.
- Geographical Sections, Rose Selections for, 23.
 German Report on New Roses, 139.
 Germany, Roses of, 154.
 Gersdorff, C. E. F., article by, 155.
 Gloire des Rosomanes, details concerning, 55.
 Gold Medal Roses, English, 144.
 Gravereaux rose-gardens, 132.
 Great Britain, Roses of, 148.
 Greatest Rose-Garden in the World, 132.
- Hardy Roses, report on, 71.
 Hill, Grace A., article by, 97.
 Holland, Roses of, 154.
 Hugonis mentioned, 54.
- Irwin, W. G., article by, 59.
- Kansas, Rose-Garden in, 75.
 Kentucky, Back-yard Rose-Garden in, 61.
 Kordes, Wilhelm, letter from, 139.
- Labels, discussion of, 113.
 Langbehn, W. L., article by, 95.
 Leavitt, C. W., article by, 57.
 Luxembourg, Roses of, 154.
- Manetti cuttings, handling, 93.
 McFarland, J. Horace, article by, 19.
 Meagher, Mrs. C. E., article by, 77.
 Members' Rose Forum, 52.
 Mills, Dr. Edmund M., portrait of, Plate II, facing 9; referred to, 101.
 Model Back-Yard Rose-Garden, Plate XIX, facing 184.
 Montana Speaks Up! 79.
 Mulching with manure, 77.
 Mulford, F. L., article by, 105.
 Murdoch, Miss M. L., letter from, 102.
- National Rose Society mentioned, 125.
 New Day of the Rose, The, 14.
 New Garden Roses, Who Will Make Them Worth While? 19.
 New Roses of All the World, 147.
 New Roses of 1922, 142.
 New Zealand, Roses of, 153.
 Nicolas, J. H., article by, 71.

- Oglevee, J. A. B., article by, 75.
 One Hundred and Twenty Roses Described and Recorded, 155.
 Ontario, Southern, Rose Report from, 73.
 Origination of new roses, 19.
 Orleans rose nurseries visited, 129.
 Overbey, Mrs. W. D., letter from, 103.
 Own-root roses, commendation of, 55.
 Own-root roses discussed, 81.
- Page, Courtney, statement by, 125; article by, 142.
 Paris Rose Show, 126.
 Paul's Scarlet Climber, Plate VII, facing 88.
 Pennock, S. S. article by, 107.
 Perkins, George C., article by, 91.
 Pernet-Ducher, Mons. Jules, Plate XII, facing 125; visited, 129.
 Philippines, Roses in, 121.
 Phosphoric acid for roses, 49.
 Planting roses, 46.
 Plotting the rose-garden, 113.
 Portland, Oregon, Report from, 99.
 Public Schools, Rose Annuals for, 53.
 Pittsburgh, Roses Near, 59.
 Pyle, Robert, message from, 9; article by, 19.
- Ragged Robin stock, details concerning, 55; discussed, 92.
 Ratcliffe, J. L., referred to, 103.
 Receiving roses, 46.
 Registration of Roses, 1922, 175.
 Rhodas, Mrs. James M., article by, 83.
 Rome, Surprising Rose Climate of, 136.
 Rosa acicularis, 97; where it grows, Plate IX, facing 100.
 Rosa odorata stock, 92.
 "Rose City of the East?" 68.
 Rose Forum, Members', 52.
 Rose-growers, suggestions to, 81.
 Rose Happenings in America, 99.
 Rose Notes, 176.
 Rose stocks, tests of, 106.
 Rose-Test Garden, National, 105.
 Roseraie de L'Hay, visited, 127, described, 132; Air-plane View, Plate XIV, facing 137.
- Roses as an Open Sesame, 12.
 Roses discussed, 87.
 Roses Every Day in the Year! 83.
 Roses in Australia, 118.
 Roses in the Philippines, 121.
 Roses, New, 142, 147.
 Roses Registered in 1922, 175.
- Sandy soil, to remedy, 54.
 Schoener, Father, visit to, 86.
 Schwab, Charles M., rose-gardens of, 57; Plate V, facing 56.
 Seattle, Washington, report from, 100.
 Secretary's European Rose Visits, 124.
 Senni, Countess Giulio, letters from, 136.
 Sensation, new Hybrid Tea Rose, Plate I (Frontispiece).
 Sherlock, C. C., article by, 16.
 Siret, Mons. Charles, visited, 131.
 Slips, or cuttings, 52.
 Soil selection for roses, 43.
 Souvenir de Claudius Pernet, report on, 107.
 Spokane, bloom-record in 95.
 Stocks, rose, used in California, 92.
 "Suckers," guarding against, 53.
 Summer care of roses, 47.
- Thomas, Capt. George C., Jr., article by, 23; visited, 88.
 Turbat, Mons., visited, 129.
- United States, Roses of, 153.
- Van Fleet Hybrid, Rosa Hugonis \times ~~P~~ Radiance, Plate XVIII, facing 169.
 Varieties to plant, 45.
 Vesuvius, New English Rose, Plate XVII, facing 152.
- Wedrick, Chester D., article by, 73.
 What Is the Name of That Rose? 113.
 What Roses Are Really Hardy, 71.
 Williams, A. H., letter from, 104.
 Wilson, E. H., article by, 118.
 Winter protection, 48.
 Wister, John C., articles by, 85, 124.
 Wood, W. C., article by, 61.
 Wright, Richardson, article by, 12.

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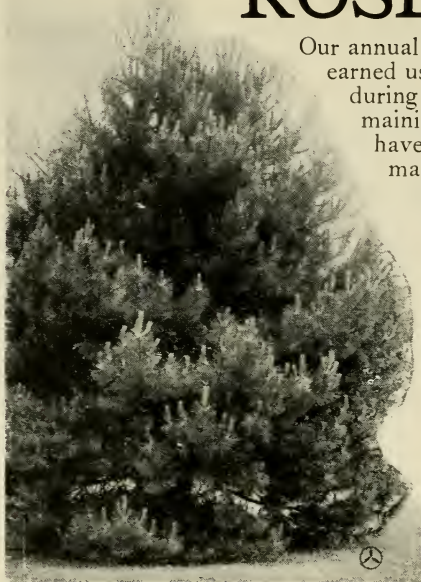
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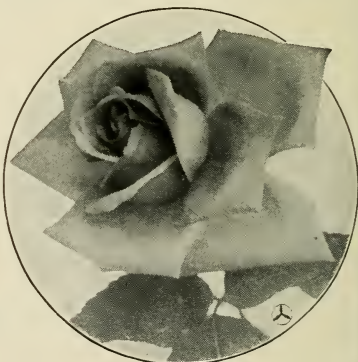
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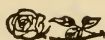
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